MUSIC ATELIER

AT45

Owner's Manual

Before using this unit, carefully read the sections entitled: "IMPORTANT SAFETY INSTRUCTIONS" (Owner's manual p. 2), "USING THE UNIT SAFELY" (Owner's manual p. 3), and "IMPORTANT NOTES" (Owner's manual p. 5). These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, Owner's manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.

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CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

ATTENTION: RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS.

IMPORTANT SAFETY INSTRUCTIONS
SAVE THESE INSTRUCTIONS

WARNING - When using electric products, basic precautions should always be followed, including the following:

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any of the ventilation openings. Install in accordance with the manufacturers instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Never use with a cart, stand, tripod, bracket, or table except as specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

For the U.K.

IMPORTANT: THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.

BLUE: NEUTRAL
BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.
The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.
Under no circumstances must either of the above wires be connected to the earth terminal of a three pin plug.

USING THE UNIT SAFELY

INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

About ⚠WARNING and ⚠CAUTION Notices

⚠WARNING	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
⚠CAUTION	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.

About the Symbols

⚠	The △ symbol alerts the user to important instructions or warnings.The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.
	The ⃠ symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.
	The ● symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.

ALWAYS OBSERVE THE FOLLOWING

⚠WARNING

- Before using this unit, make sure to read the instructions below, and the Owner's Manual.

- Do not open or perform any internal modifications on the unit.

- Do not attempt to repair the unit, or replace parts within it (except when this manual provides specific instructions directing you to do so). Refer all servicing to your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.

- Never use or store the unit in places that are:
  - Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are
  - Damp (e.g., baths, washrooms, on wet floors); or are
  - Humid; or are
  - Exposed to rain; or are
  - Dusty; or are
  - Subject to high levels of vibration.

- Make sure you always have the unit placed so it is level and sure to remain stable. Never place it on stands that could wobble, or on inclined surfaces.

- The unit should be connected to a power supply only of the type described in the operating instructions, or as marked on the rear panel of unit.

- Use only the attached power-supply cord. Also, the supplied power cord must not be used with any other device.

⚠WARNING

- Do not excessively twist or bend the power cord, nor place heavy objects on it. Doing so can damage the cord, producing severed elements and short circuits. Damaged cords are fire and shock hazards!

- This unit, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level, or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should immediately stop using the unit, and consult an audiologist.

- Do not allow any objects (e.g., flammable material, coins, pins); or liquids of any kind (water, soft drinks, etc.) to penetrate the unit.

- Immediately turn the power off, remove the power cord from the outlet, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page when:
  - The power-supply cord, or the plug has been damaged; or
  - If smoke or unusual odor occurs
  - Objects have fallen into, or liquid has been spilled onto the unit; or
  - The unit has been exposed to rain (or otherwise has become wet); or
  - The unit does not appear to operate normally or exhibits a marked change in performance.

⚠ WARNING

- In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the unit.

- Protect the unit from strong impact.
(Do not drop it!)

- Do not force the unit's power-supply cord to share an outlet with an unreasonable number of other devices. Be especially careful when using extension cords—the total power used by all devices you have connected to the extension cord's outlet must never exceed the power rating (watts/amperes) for the extension cord. Excessive loads can cause the insulation on the cord to heat up and eventually melt through.

- Before using the unit in a foreign country, consult with your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.

- Do not put anything that contains water (e.g., flower vases) on this unit. Also, avoid the use of insecticides, perfumes, alcohol, nail polish, spray cans, etc., near the unit. Swiftly wipe away any liquid that spills on the unit using a dry, soft cloth.

⚠ CAUTION

- The unit should be located so that its location or position does not interfere with its proper ventilation.

- Always grasp only the plug on the power-supply cord when plugging into, or unplugging from, an outlet or this unit.

- At regular intervals, you should unplug the power plug and clean it by using a dry cloth to wipe all dust and other accumulations away from its prongs. Also, disconnect the power plug from the power outlet whenever the unit is to remain unused for an extended period of time. Any accumulation of dust between the power plug and the power outlet can result in poor insulation and lead to fire.

- Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be placed so they are out of the reach of children.

- Never climb on top of, nor place heavy objects on the unit.

⚠ CAUTION

- Never handle the power cord or its plugs with wet hands when plugging into, or unplugging from, an outlet or this unit.

- If you need to move the instrument, take note of the precautions listed below. At least two persons are required to safely lift and move the unit. It should be handled carefully, all the while keeping it level. Make sure to have a firm grip, to protect yourself from injury and the instrument from damage.
  - Check to make sure the knob bolt securing the unit to the stand have not become loose. Fasten them again securely whenever you notice any loosening.
  - Disconnect the power cord.
  - Disconnect all cords coming from external devices.
  - Raise the adjusters on the stand.
  - Close the lid.
  - Remove the music rest.

- Before cleaning the unit, turn off the power and unplug the power cord from the outlet (p. 17).

- Whenever you suspect the possibility of lightning in your area, pull the plug on the power cord out of the outlet.

- Be careful when opening/closing the lid so you do not get your fingers pinched (p. 16). Adult supervision is recommended whenever small children use the unit.

- When removing the music rest's attachment screws and the screws, knob bolts and caps used for assembling the stand, be sure to keep them somewhere out of the reach of children to prevent any child from accidentally swallowing these parts.

Important Notes

In addition to the items listed under "IMPORTANT SAFETY INSTRUCTIONS" and "USING THE UNIT SAFELY" on pages 2 and 3, please read and observe the following:

Power Supply

- Do not connect this unit to same electrical outlet that is being used by an electrical appliance that is controlled by an inverter (such as a refrigerator, washing machine, microwave oven, or air conditioner), or that contains a motor. Depending on the way in which the electrical appliance is used, power supply noise may cause this unit to malfunction or may produce audible noise. If it is not practical to use a separate electrical outlet, connect a power supply noise filter between this unit and the electrical outlet.
- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.
- Although the LCD and LEDs are switched off when the POWER switch is switched off, this does not mean that the unit has been completely disconnected from the source of power. If you need to turn off the power completely, first turn off the POWER switch, then unplug the power cord from the power outlet. For this reason, the outlet into which you choose to connect the power cord's plug should be one that is within easy reach.

Placement

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.
- Noise may be produced if wireless communications devices, such as cell phones, are operated in the vicinity of this unit. Such noise could occur when receiving or initiating a call, or while conversing. Should you experience such problems, you should relocate such wireless devices so they are at a greater distance from this unit, or switch them off.
- Observe the following when using the unit's floppy disk drive. For further details, refer to "Before Using Floppy Disks" (p. 6).
  - Do not place the unit near devices that produce a strong magnetic field (e.g., loudspeakers).
  - Install the unit on a solid, level surface.
  - Do not move the unit or subject it to vibration while the drive is operating.
- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Also, do not allow lighting devices that normally are used while their light source is very close to the unit (such as a piano light), or powerful spotlights to shine upon the same area of the unit for extended periods of time. Excessive heat can deform or discolor the unit.
- When moved from one location to another where the temperature and/or humidity is very different, water droplets (condensation) may form inside the unit. Damage or malfunction may result if you attempt to use the unit in this condition. Therefore, before using the unit, you must allow it to stand for several hours, until the condensation has completely evaporated.
- Do not allow rubber, vinyl, or similar materials to remain on the unit for long periods of time. Such objects can discolor or otherwise harmfully affect the finish.
- Do not allow objects to remain on top of the keyboard or pedal board. This can be the cause of malfunction, such as keys ceasing to produce sound.
- Do not paste stickers, decals, or the like to this instrument. Peeling such matter off the instrument may damage the exterior finish.

Maintenance

- To clean the unit, use a dry, soft cloth; or one that is slightly dampened. Try to wipe the entire surface using an equal amount of strength, moving the cloth along with the grain of the wood. Rubbing too hard in the same area can damage the finish.
- Never use benzine, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

Repairs and Data

- Please be aware that all data contained in the unit's memory may be lost when the unit is sent for repairs. Important data should always be backed up on a floppy disk, or written down on paper (when possible). During repairs, due care is taken to avoid the loss of data. However, in certain cases (such as when circuitry related to memory itself is out of order), we regret that it may not be possible to restore the data, and Roland assumes no liability concerning such loss of data.

Additional Precautions

- Please be aware that the contents of memory can be irretrievably lost as a result of a malfunction, or the improper operation of the unit. To protect yourself against the risk of loosing important data, we recommend that you periodically save a backup copy of important data you have stored in the unit's memory on a floppy disk.
- Unfortunately, it may be impossible to restore the contents of data that was stored on a floppy disk once it has been lost. Roland Corporation assumes no liability concerning such loss of data.
- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- Never strike or apply strong pressure to the display.
- A small amount of noise may be heard from the display during normal operation.

- When connecting / disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal elements.
- A small amount of heat will radiate from the unit during normal operation.
- To avoid disturbing your neighbors, try to keep the unit's volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (especially when it is late at night).
- When you need to transport the unit, pack it in shock-absorbent material. Transporting the unit without doing so can cause it to become scratched or damaged, and could lead to malfunction.
- Do not apply undue force to the music rest while it is in use.
- Use a cable from Roland to make the connection. If using some other make of connection cable, please note the following precautions.
  - Some connection cables contain resistors. Do not use cables that incorporate resistors for connecting to this unit. The use of such cables can cause the sound level to be extremely low, or impossible to hear. For information on cable specifications, contact the manufacturer of the cable.
- Before opening or closing the keyboard lid, always make sure that no pets or other small animals are located on top of the instrument (in particular, they should be kept away from the keyboard and its lid). Otherwise, due to the structural design of this instrument, small pets or other animals could end up getting trapped inside it. If such a situation is encountered, you must immediately switch off the power and disconnect the power cord from the outlet. You should then consult with the retailer from whom the instrument was purchased, or contact the nearest Roland Service Center.

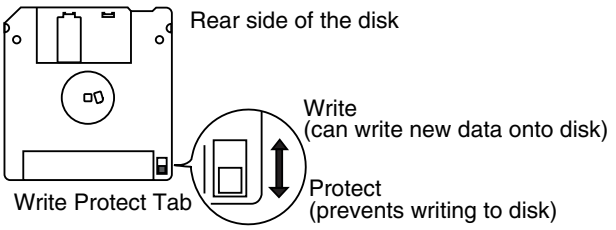
Before Using Floppy Disks

Handling the Floppy Disk Drive

- Install the unit on a solid, level surface in an area free from vibration.
- Avoid using the unit immediately after it has been moved to a location with a level of humidity that is greatly different than its former location. Rapid changes in the environment can cause condensation to form inside the drive, which will adversely affect the operation of the drive and/or damage floppy disks. When the unit has been moved, allow it to become accustomed to the new environment (allow a few hours) before operating it.
- To insert a disk, push it gently but firmly into the drive—it will click into place. To remove a disk, press the EJECT button firmly. Do not use excessive force to remove a disk which is lodged in the drive.
- Never eject a disk while reading or writing is in progress, since that can damage the magnetic surface of the disk, rendering it unusable. (The disk drive's indicator will light up at full brightness when the drive is busy reading or writing data. Ordinarily, the indicator will be less brightly lit, or be extinguished.)
- Remove any disk from the drive before powering up or down.
- To prevent damage to the disk drive's heads, always try to hold the floppy disk in a level position (not tilted in any direction) while inserting it into the drive. Push it in firmly, but gently. Never use excessive force.
- To avoid the risk of malfunction and/or damage, insert only floppy disks into the disk drive. Never insert any other type of disk. Avoid getting paper clips, coins, or any other foreign objects inside the drive.

Handling Floppy Disks

- Floppy disks contain a plastic disk with a thin coating of magnetic storage medium. Microscopic precision is required to enable storage of large amounts of data on such a small surface area. To preserve their integrity, please observe the following when handling floppy disks:
  - Never touch the magnetic medium inside the disk.
  - Do not use or store floppy disks in dirty or dusty areas.
  - Do not subject floppy disks to temperature extremes (e.g., direct sunlight in an enclosed vehicle). Recommended temperature range: 10 to 50° C (50 to 122° F).
  - Do not expose floppy disks to strong magnetic fields, such as those generated by loudspeakers.
- Floppy disks have a "write protect" tab which can protect the disk from accidental erasure. It is recommended that the tab be kept in the PROTECT position, and moved to the WRITE position only when you wish to write new data onto the disk.



- The identification label should be firmly affixed to the disk. Should the label come loose while the disk is in the drive, it may be difficult to remove the disk.
- Store all disks in a safe place to avoid damaging them, and to protect them from dust, dirt, and other hazards. By using a dirty or dust-ridden disk, you risk damaging the disk, as well as causing the disk drive to malfunction.
- Disks containing performance data for this unit should always be locked (have their write protect tab slid to the "Protect" position) before you insert them into the drive on some other unit (except the PR-300, or a product in the HP-G, MT, KR, or Atelier families), or into a computer's drive. Otherwise (if the write protect tab remains in the "Write" position), when you perform any disk operations using the other device's disk drive (such as checking the contents of the disk, or loading data), you risk rendering the disk unreadable by this unit's disk drive.

* GS ( ) is a registered trademark of Roland Corporation.
* XG lite ( ) is a registered trademark of Yamaha Corporation.
* All product names mentioned in this document are trademarks or registered trademarks of their respective owners.

Main Features

Basic concepts of the ATELIER series

A full complement of organ sounds

A wide range of basic organ sounds, ranging from jazz organ and pipe organ to theatre organ, are onboard so you are sure to enjoy having access to all the sounds you expect from an organ.

Panel layout based on a tradition of emphasis on realtime operation

Based on the idea that you should be able to sit down and begin playing immediately, the operation buttons of the panel are arranged by function as dictated by classic organ traditions, ensuring easy and intuitive operation. All models of the ATELIER series feature the same operability, allowing you to start playing immediately even if you switch models.

High-quality sounds that you can use without editing

In addition to a full range of organ sounds, high-quality sounds such as strings and brass are also included onboard. You can simply select sounds and enjoy playing the organ—no need to perform complicated editing operations.

Expansive lower keyboard with damper pedal for piano-like expressiveness

Piano is indispensable to the performance of contemporary music. On the ATELIER series, the lower keyboard features an expanded range that gives you the expressive power of a piano. The keyboard also features half-damper pedal capability and initial touch sensitivity, both indispensable for piano performance.
All models provide high-quality grand piano sounds.

Design utilizes your existing music data

The ATELIER series is designed so that even on new models, you will feel right at home and can begin playing immediately. Data compatibility has also been carefully taken into account, and song data or registration data from earlier models can be used without change.

Music styles from around the world

Many of the best-loved musical styles from around the world (rhythm and automatic accompaniment patterns) are built in, allowing you to enjoy an international range of performances.

Utilizes SMF music files

Compatible with GM2, the world standard in SMF music files, and equipped with its own floppy disk drive, the AT-45 brings you access to the wealth of SMF music files available on the market. You can also mute parts, allowing you to practice the part for each hand separately, and enjoy performing ensemble with the music files.

Features

Highly Realistic Rhythms and Automatic Accompaniment Functions

All rhythms use data from performances by professional drummers, featuring high-quality patterns with all the grooves and subtle nuance of the real thing. In addition, you can use automatic accompaniments that are perfectly matched to each rhythm to enjoy the feeling of playing with your own band in the background.

Newly developed Active Expression sounds

For some of the sounds, moving the expression pedal will vary not only the volume but also the tone, or add other sounds. From pianissimo to fortissimo, the tonal character of the sound itself will change as you perform a crescendo, or strings may appear behind the piano, creating dynamic changes in tonality.

Main Features

Human voices
In addition to a full complement of organ tones, the AT-45 also features tones that express a wide range of human vocal qualities, including “Jazz Scat,” which changes according to how firmly the keys are pressed, and “Classical” tones that perfectly express that choir image.

“Music Assistant” functions
The “Music Assistant” function makes it easy to recall appropriate rhythm and sound settings simply by selecting a desired atmosphere for your song.

Registration Buttons
The AT-45 features eight highly visible and intuitive buttons for calling up registrations, which allow you to switch among tone and rhythm settings instantly. Furthermore, these are located between the upper and lower manuals for better access when performing in real time.

Harmony Intelligence
The Harmony Intelligence function automatically adds harmony to the upper keyboard sound according to the chord you play in the lower keyboard. This gives you greater tonal depth and a more powerful performance.

Rhythm Customize Function Lets You Arrange the Internal Rhythms
You can use the “Rhythm Customize” function to edit the internal rhythms, for example by adding a single cymbal at the end or changing the drum tone in a pattern.

64-note lower keyboard for plenty of range
Features a full 64 keys in the Lower keyboard, starting from the A note just like a piano, making it easier to perform corresponding piano pieces on this instrument.
You can split the keyboard and use it to play a solo voice. You can also use the Drum/SFX function to assign drum sounds to the entire Lower keyboard.

Notation display in the LCD screen
The large LCD screen allows recorded data or loaded music data to be displayed as a musical notation. You can enjoy the convenience of playing from a notation, or checking the notation of a song you recorded.
Furthermore, the instrument features a color LCD panel for great visibility and comfortable operation.

Robust Reproduction Capabilities—Even the Low Notes and Reverb
A powerful low end and rich, enveloping reverberation are major characteristics of the organ.
The instrument’s 25 cm speaker and speaker box brings out all the lows, and then some. And reverb featuring RSS technology produces the profound ambience and full presence found in a cathedral.

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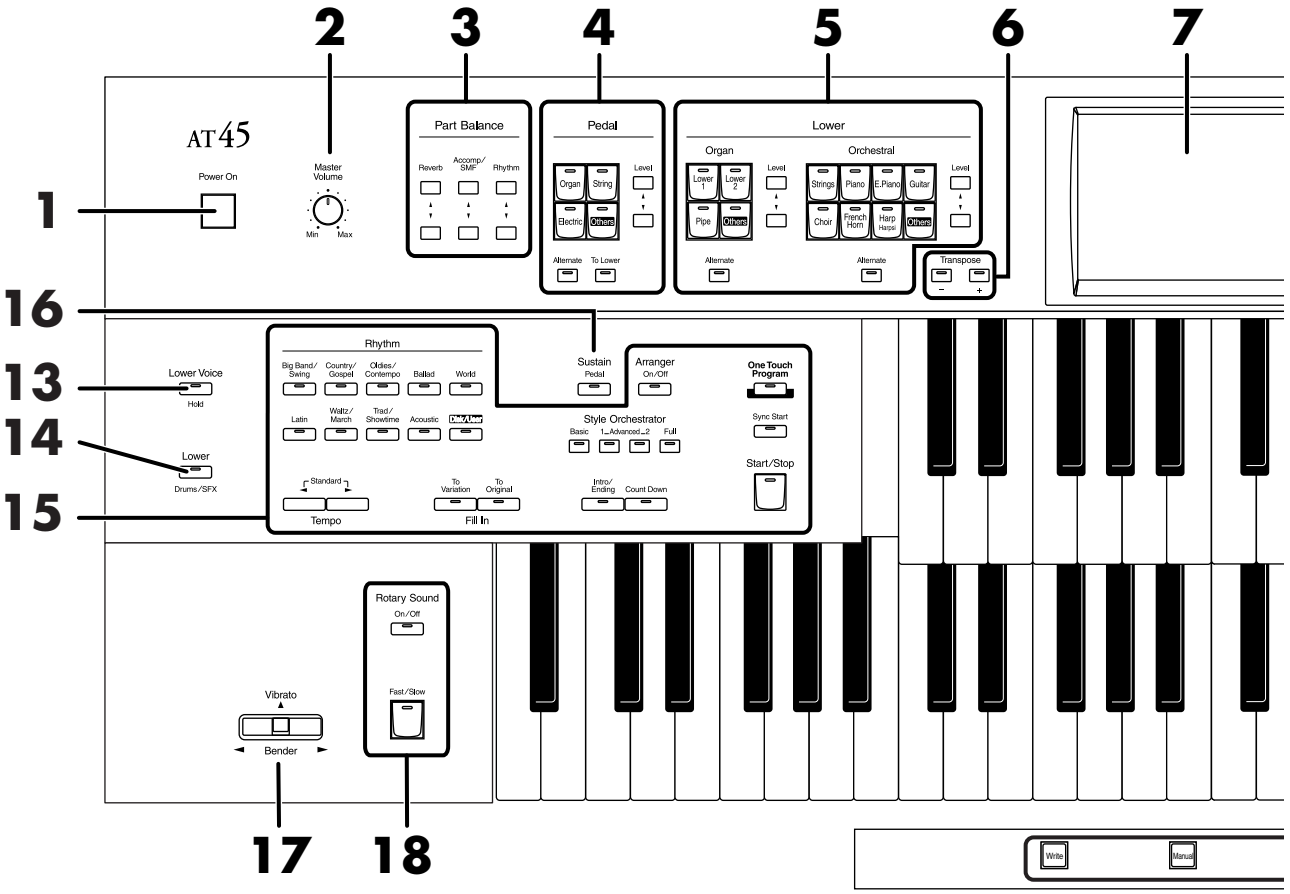
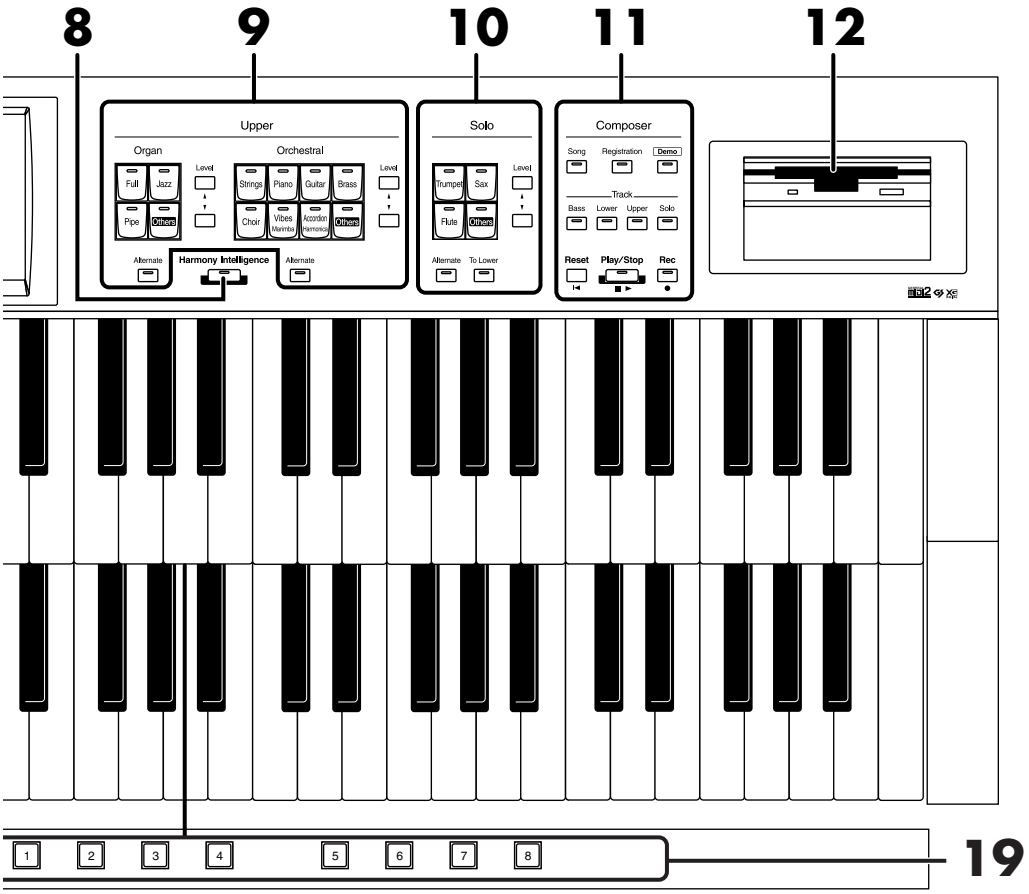
Panel Descriptions



1. **[Power On] switch → p. 17**
2. **[Master Volume] knob → p. 17**
3. **Part Balance [▲] [▼] buttons → p. 44**
4. **Pedal Bass Voice select buttons → p. 37**
   Pedal Part
   [Alternate] button
   [To Lower] button → p. 127
   Level [▲] [▼] buttons → p. 44
5. **Lower Voice select buttons → p. 36**
   Lower Organ Part
   Lower Orchestral Part
   [Alternate] button
   Level [▲] [▼] buttons → p. 44
6. **Transpose [-] [+] buttons → p. 102**
7. **Touch Screen → p. 22**
8. **[Harmony Intelligence] button → p. 109**
9. **Upper Voice select buttons → p. 36**
   Upper Organ Part
   Upper Orchestral Part
   [Alternate] button
   Level [▲] [▼] buttons → p. 44
10. **Solo Voice select buttons → p. 38**
    Solo Part
    [Alternate] button
    [To Lower] button → p. 124
    Level [▲] [▼] buttons → p. 44
11. **Composer → p. 128**
    [Reset] button
    [Play/Stop] button
    [Rec] buttons → p. 137
    Track buttons → p. 128
    [Song] button
    [Registration] button → p. 91
    [Demo] button → p. 26, p. 131



12. **Floppy Disk Drive → p. 66, p. 86, p. 130**

13. **Lower Voice [Hold] button → p. 50**

14. **Lower**
[Drums/SFX] button → p. 48

15. **Rhythm select buttons → p. 51**
Tempo [◄] [►] buttons → p. 57
Fill In [To Variation] button → p. 59
Fill In [To Original] button → p. 59
Arranger [On/Off] button → p. 58
Style Orchestrator buttons → p. 59
[Intro/Ending] button → p. 55, p. 56–p. 57
[Count Down] button → p. 58
[One Touch Program] button → p. 64
[Sync Start] button → p. 56
[Start/Stop] button → p. 55, p. 57

16. **Sustain [Pedal] button → p. 116**

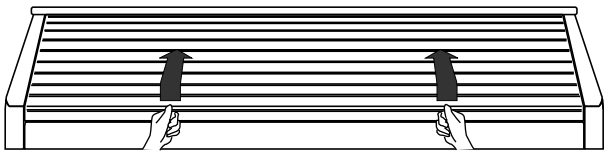
17. **[Bender/Vibrato] lever → p. 103**

18. **Rotary Sound → p. 111**
[On/Off] button
[Fast/Slow] button

19. **Registration buttons**
[Write] button → p. 80
[Manual] button → p. 83
Registration [1] - [8] buttons → p. 79

Before You Start Playing

Opening/Closing the Lid



1. **To open the lid, hold it with both hands and slide it to the rear.**
2. **To close the lid, slowly pull it forward until it stops.**

NOTE

Be careful not to get your fingers caught when opening or closing the lid. Adult supervision is recommended when small children are going to be using the instrument.

NOTE

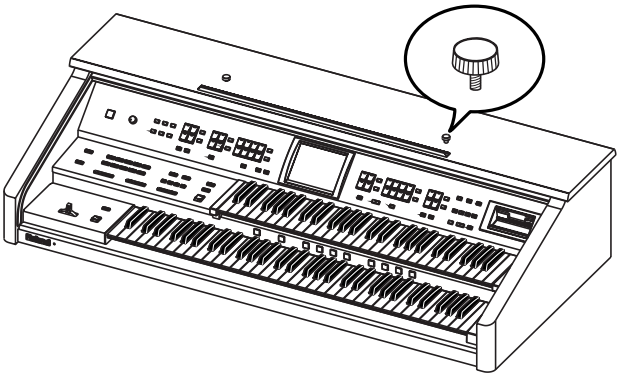
To prevent accidents, be sure to close the lid before moving the organ.

NOTE

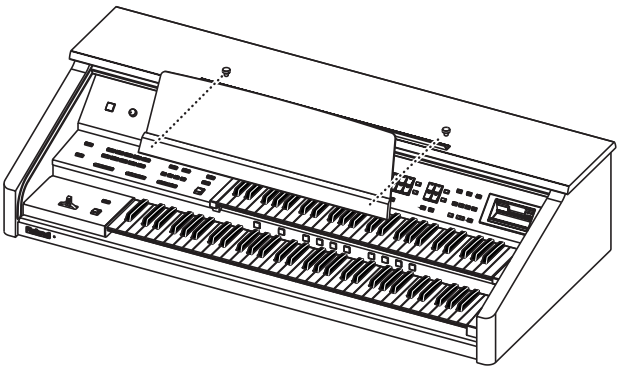
Make sure you don't have anything (such as sheet music) on the keyboard when you close the lid.

Setting Up the Music Rest

1. **Insert the supplied screws for the music rest into the screw holes located on the top of the instrument, and lightly tighten them.**



2. **Put the music rest between the screws and the AT-45's body.**



3. **While supporting the music rest with one hand, secure it in place by turning the screws.**

   When attaching the music rest, support it firmly with one hand to make sure that you don't drop it. Be careful, so you don't get your fingers pinched.

4. **To remove the music rest, support it with one hand while loosening the screws.**

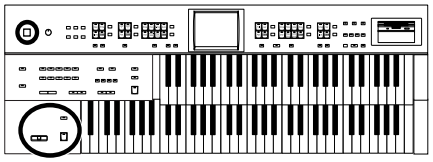
   After removing the music rest, don't forget to retighten the screws.

NOTE

Do not apply excessive force to the installed music rest.

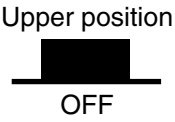
NOTE

Be sure to use the supplied screws for attaching the music rest.



Connecting the Power Cord

1. First, make sure that the [Power On] switch at the panel's left side is OFF (not pushed in).



2. Connect the supplied power cord to the AC Inlet connector, then plug the other end into an AC outlet.

NOTE

Only use the power cord supplied with this instrument.

NOTE

Whenever you do not intend to use the instrument for extended periods of time, pull out the power cord from the AC outlet.

Turning the Power On and Off

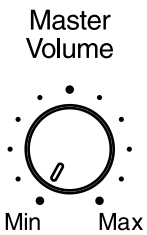
NOTE

Once the connections have been completed, turn on or off power to your various devices in the order specified. By turning on or off devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.

■ Turning On the Power

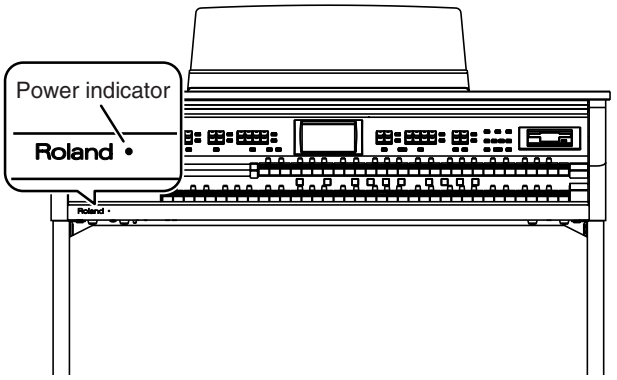
1. Make sure of the following before the power is turned on.

- Is the power cord correctly connected to the AC inlet?
- Is the power cord correctly connected to the AC outlet?
- Is the [Master Volume] knob set to the Min (minimum) position?



2. Press the [Power On] button to turn on the power.

The Power indicator lights in red.

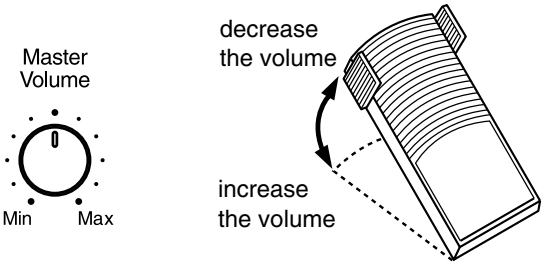


NOTE

This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.

3. The [Master Volume] knob is an overall control for adjusting the volume of the entire instrument.

Now adjust the [Master Volume] knob to a suitable level. The volume will be increased when the Expression Pedal is pressed down, and decreased when the pedal is returned.



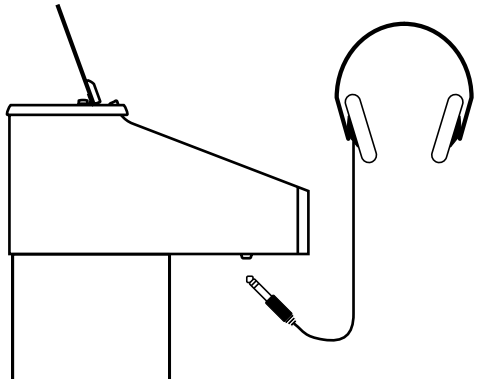
■ Turning Off the Power

1. Before switching the power off, set the [Master Volume] knob to the Min (minimum) position.

2. Press the [Power On] button to turn off the power.

Using Headphones

The AT-45 features a Phones jacks. These allows you to play without having to worry about bothering others around you, even at night.



1. **Connect your headphones to the Phones jack underneath the left side of the keyboard.**

   The sound from the built-in speakers stops.

   Now, sound is heard only through the headphones.

2. **Adjust the headphones volume with the [Master Volume] knob and Expression pedal.**

MEMO

Accepts connection of Stereo headphones.

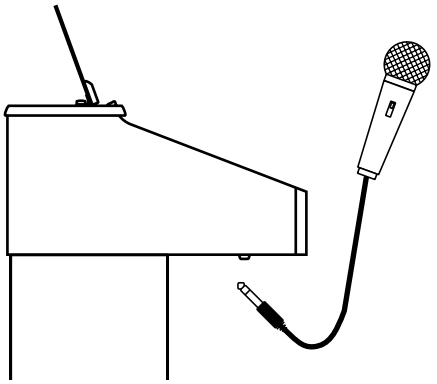
Some Notes on Using Headphones

⚠ CAUTION

- To prevent damage to the cord, handle the headphones only by the headset or the plug.
- Headphones may be damaged if the volume is too high when they are plugged in. Lower the volume on the AT-45 before plugging in headphones.
- To prevent possible auditory damage, loss of hearing, or damage to the headphones, the headphones should not be used at an excessively high volume. Use the headphones at a moderate volume level.

Using a Microphone

The AT-45 is equipped with a Mic jack.
Since this instrument has a Mic In jack, you can use a microphone to enjoy a variety of possibilities such as singing along with your performance, or singing along with SMF music files (sold separately).



1. **Connect your microphone to the Mic In jack underneath the left side of the keyboard.**
2. **Use the [Mic Volume] knob to adjust the volume level for the microphone.**
3. **Use the [Mic Echo] knob to adjust the echo level for the microphone.**

MEMO

The microphone must be purchased separately. When purchasing a microphone, please consult the vender where you bought the AT-45.

Some Notes on Using a Microphone

⚠ CAUTION

- To avoid disturbing others, be careful of the volume level when playing late at night or very early in the morning.
- When connecting a microphone to the AT-45, be sure to lower the volume. If the volume control is too high when the microphone is plugged in, noise may be produced by the speakers.
- Howling could be produced depending on the location of microphones relative to speakers. This can be remedied by:
  - Changing the orientation of the microphone.
  - Relocating the microphone so it is farther from the speakers.
  - Lowering volume levels.

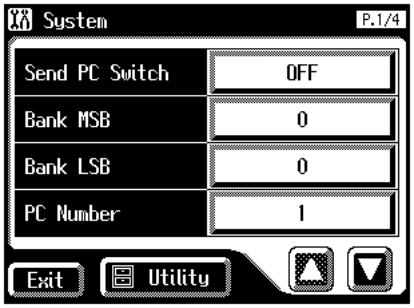
Restoring All the Factory Default Settings

You can restore all of the settings stored in the AT-45 to what they were when the instrument shipped from the factory. This function is called "Factory Reset."

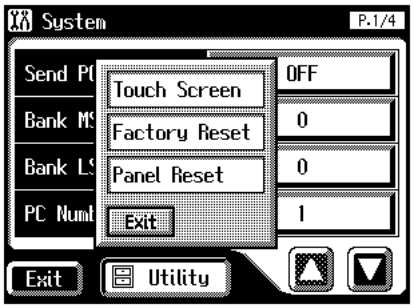
1. **Make sure there is no floppy disk in the disk drive before carrying out the procedure.**

2. **Touch <System> on the Main screen.**

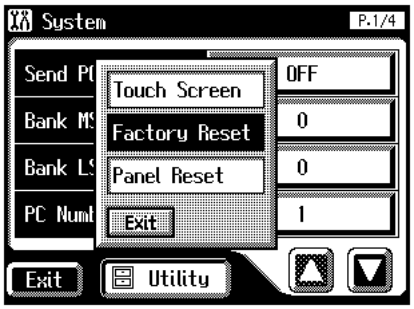
   The System screen appears.



3. **In the System screen, touch <Utility> to open the Utility screen.**



4. **In the Utility screen, touch <Factory Reset>.**



MEMO

To restore all settings other than the User memory (p. 52) to their original factory settings, touch <Panel Reset>.

The confirmation message appears on screen.

If you touch <Cancel>, the Factory Reset will not be performed, and you will return to the System screen.

5. **When you touch <OK>, the Factory Reset operation will begin, and the settings will return to the factory-set condition.**

NOTE

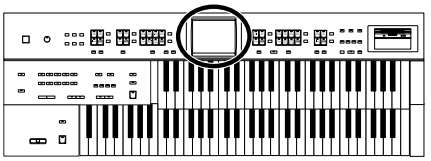
Never switch off the power while this operation is in progress!

NOTE

Loading factory default settings will erase any Registrations currently in the memory of the AT-45. To save the registrations you are currently using, refer to "Saving Registration Sets to a Floppy Disk" (p. 88).

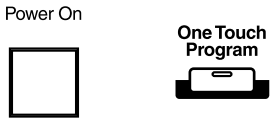
NOTE

To reset only the User memory (p. 52) to its original factory settings, refer to p. 68.

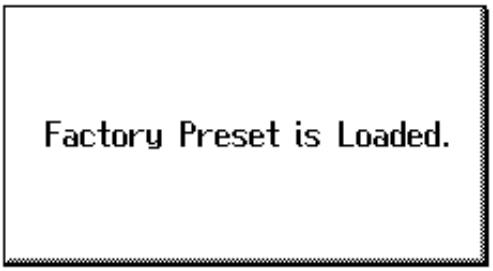


You can also use the following method to return to the factory-set condition.

1. **Make sure there is no floppy disk in the disk drive before carrying out the procedure.**
2. **Turn down the volume to the minimum level, then turn off the power.**
3. **While holding down the [One Touch Program] button, press the [Power On] switch to turn the power on.**



The following screen appears.



NOTE

Never switch off the power while this operation is in progress!

Restoring All Settings Other Than the User Memory to the Original Factory Settings

You can restore all of the settings other than the User memory (p. 52) to their original factory settings.

This function is called "Panel Reset."

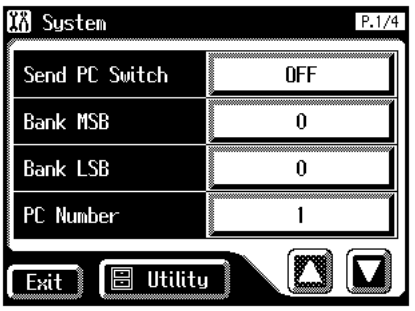
What is the User Memory?

The User memory is the area within the instrument where User rhythms you create as well as rhythms from Music Style Disks are stored.

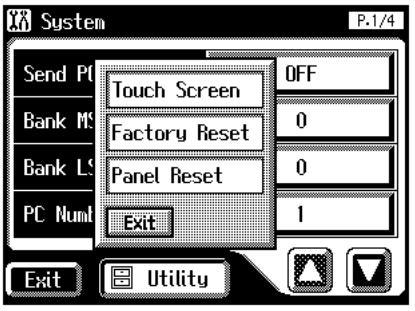
You can also copy rhythms (p. 158) saved on floppy disks to the User memory.

1. **Make sure there is no floppy disk in the disk drive before carrying out the procedure.**
2. **Touch <System> on the Main screen.**

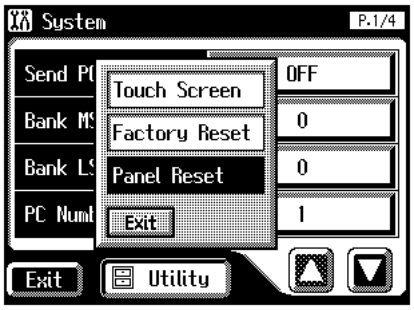
   The System screen appears.



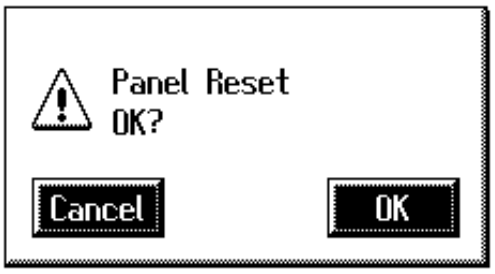
3. **In the System screen, touch <Utility> to open the Utility screen.**



4. In the Utility screen, touch <Panel Reset>.



The confirmation message appears on screen.



If you touch <Cancel>, the Panel Reset will not be performed, and you will return to the System screen.

5. When you touch <OK>, the Panel Reset operation will begin, and the settings will return to the factory-set condition.

NOTE

Never switch off the power while this operation is in progress!

NOTE

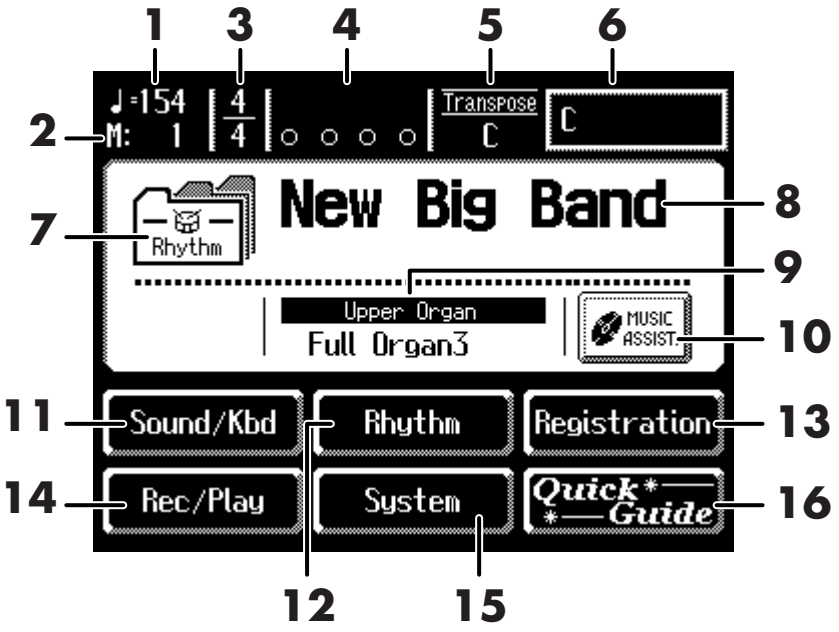
To reset only the User memory (p. 52) to its original factory settings, refer to p. 68.

About the Display

The AT-45 makes use of a Touch Screen. This lets you carry out a wide variety of actions just by touching the screen lightly.

■ Understanding the Main and Related Screens

Main Screen



Number	Explanations
1	**Tempo**
2	**Measure**
3	**Beat**
4	**Bouncing Ball** A ball will bounce in time with the rhythm or song.
5	**Transpose** Displays the transpose setting.
6	**Chord Name** Displays the name of the chord that is played in the lower keyboard.
7	**Indication button** Pressed to choose which name to have indicated; either the Rhythm Name, Song Name, or Registration Name.
8	**Rhythm Name/Song Name/Registration Name**
9	**Voice Name** Displays the name of the upper keyboard voice.
10	**MUSIC ASSIST** Press this when you want to use the Music Assistant function (p. 28).
11	**Sound/Kbd** Select a voice (tone), or make settings for the effect depth, keyboard, etc.

NOTE

The explanations in this manual include illustrations that depict what should typically be shown by the display. Note, however, that your unit may incorporate a newer, enhanced version of the system (e.g., includes newer sounds), so what you actually see in the display may not always match what appears in the manual.

NOTE

The Touch Screen is operated by touching it lightly with your finger. Pressing hard, or using a hard object can damage the Touch Screen. Be careful not to press too hard, and be sure to use only your fingers to operate the Touch Screen.

NOTE

The positioning of the Touch Screen may become displaced due to changes in the surrounding environment and over time. If this happens, follow the steps in "Repositioning the Touch Screen" (p. 181) to correct the pointer position.

NOTE

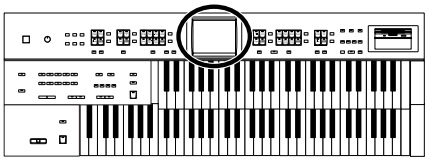
Do not place items on the touch screen.

MEMO

You can adjust the brightness of the screen (p. 184).

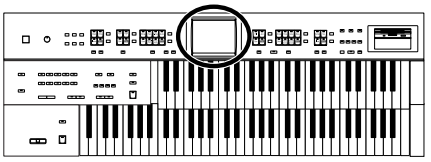
MEMO

You can set the Main screen so that the bouncing ball does not appear (p. 182).

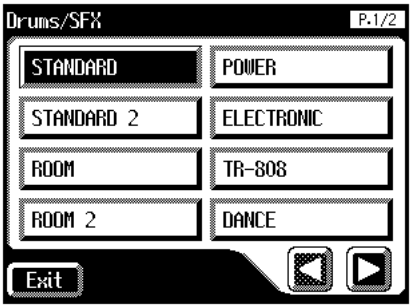


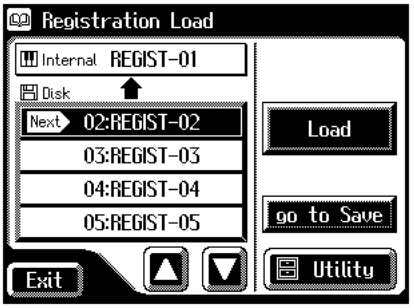
Number	Explanations
12	**Rhythm** Play the internal rhythms, and play disk rhythms or store them in internal memory. Rhythm-related settings can also be made here.
13	**Registration** Load registrations from disk into internal memory, or save registrations to disk. Registration-related settings can also be made here.
14	**Rec/Play** Play back or record a song. You can also view a notation display while a song plays.
15	**System** Make various settings.
16	**Quick Guide** Displays the Quick Guide screen. While the Quick Guide screen is displayed, you can press the keyboard, a button, or a foot switch to jump to the related setting screen (p. 32).

V-LINK	This icon is displayed when the V-LINK function is on. → V-LINK function (p. 182)
SMF	This icon is displayed when the instrument contains SMF music files.
EDITED	This icon is displayed when any portion of the recorded song has been altered.
ACT EXP	This icon appears in the display when an Active Expression voice is selected. → Active Expression Voice (p. 43)
EX	This icon appears in the display when an EX voice is selected. → Ex Voice (p. 39)



About the principal icons and the Utility screen



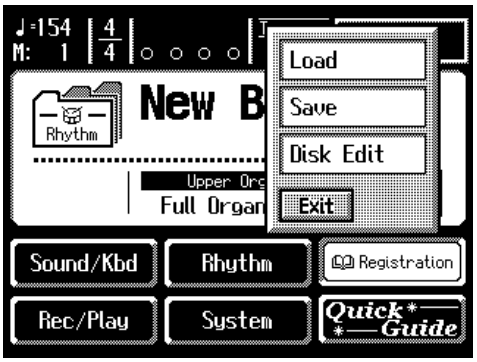


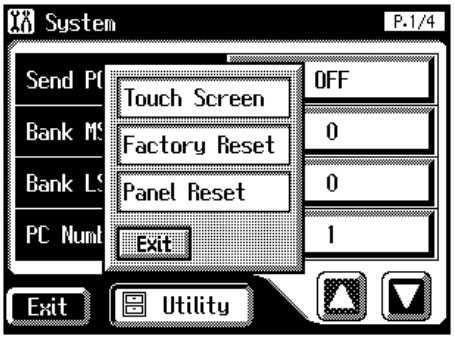
Button	Meaning
	Depending on the function, some screens are spread over multiple pages. You can touch to display the next or previous page of the screen.
	Touch this when you want to exit (close) the currently displayed screen. Normally, touching several times takes you back to the Main screen.

Sub-windows

You can touch <Registration> in the Main screen or <Utility> in other screens to access a screen like the following.

This type of screen is called a "sub-window."





MEMO

When you touch a menu in the sub-window, the sub-window will close, and the selected menu screen will appear.

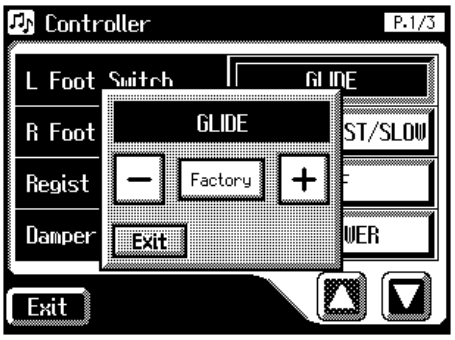
MEMO

In a sub-window, touch <Exit> to exit the sub-window.

Sub-windows for setting values

When you are making settings in the System screen, the following type of screen appears.

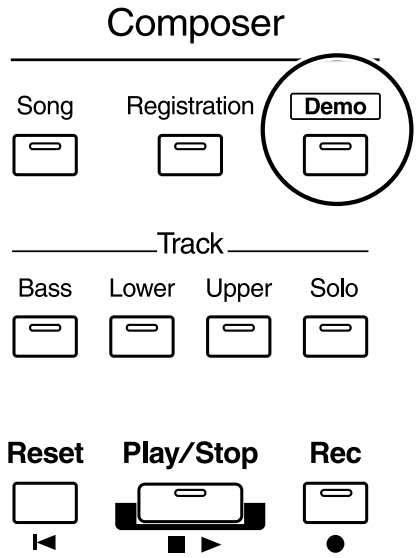
Factory	Return to the factory settings.
− +	Modify the value.



Convenient Functions

Listening to the Demo Songs

The AT-45 provides demo songs. Here's how to play the Demo songs, and fully appreciate the sounds, Rhythms, and Automatic Accompaniment that are available with the AT-45.



1. Make sure that a floppy disk is not inserted in the disk drive.

If a floppy disk is in the disk drive, press the Eject button (p. 66) and remove the floppy disk.

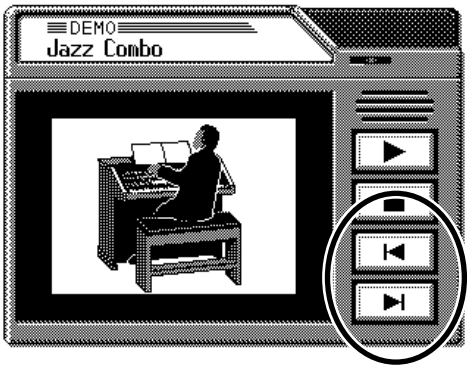
2. Press the [Demo] button to make the indicator light.

The Demo Screen appears.

MEMO

For details on the composer of each demo song and their profiles, refer to "Demo Song List" (p. 216).

3. **Touch < ⏮ > or < ⏭ > on screen to select the demo song.**



4. **Touch < ▶ > to start playback of the demo song.**

When the selected demo song ends, the next demo song will begin playing.

5. **Touch < ■ > to stop playback of the demo song.**

6. **Press the [Demo] button to exit the demonstration screen.**

MEMO

You can start/stop the demo songs by pressing the panel [Play/Stop] button.

If the following screen appears

If the performance song in the unit has not been saved to floppy disk, the following message appears, and it will not be possible to play the Demo songs.

1. **If you want to delete the performance data, touch <OK>.**

If you do not want to delete the performance data, touch <Cancel>.

MEMO

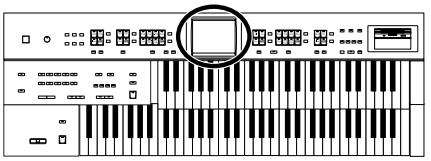
The performance data can be saved on a floppy disk. If you wish to save the musical data to a floppy disk, refer to “Saving Performance Songs Onto Floppy Disk” (p. 143).

NOTE

All rights reserved. Unauthorized use of this material for purposes other than private, personal enjoyment is a violation of applicable laws.

NOTE

The data for the Demo song that is being played is not available at the MIDI Out connector.

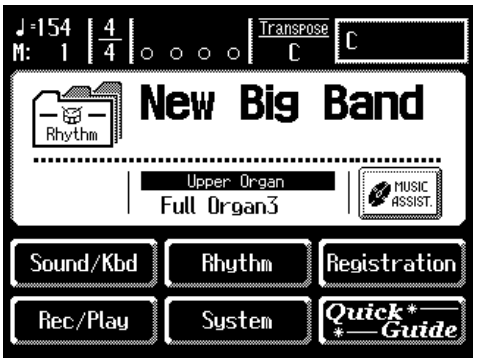


Music Assistant Function

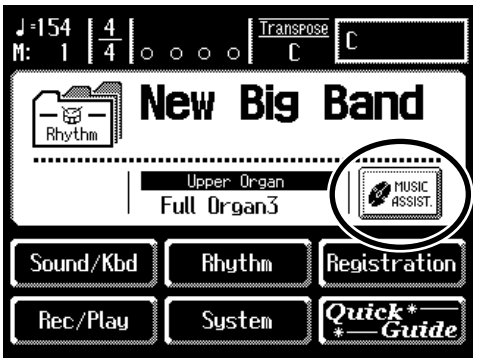
A collection of the world's best, most well-known songs were carefully selected, then the optimum panel settings for each of them were determined, and the resulting data was stored inside the instrument.

Simply select the keyword that most closely suggests the character of the song you have in mind, and a rhythm performance, a sound for the melody, and other selections will be made for you. Once you've selected a keyword, all you have to do is play the keyboard to start performing.

1. **Display the Main screen.**



2. **Touch <MUSIC ASSIST> on the Main screen.**



The Music Assistant screen appears.

MEMO

If some other screen is displayed, touch <Exit> to close the currently open screen.

3. Touch <▲><▼> to switch screens, and touch a keyword appropriate for the character of the song.

The Registration buttons [1]–[4] flash.

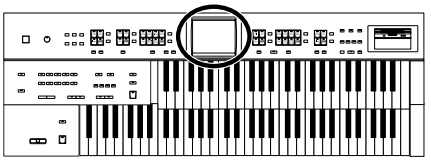
Panel settings appropriate for the keyword will automatically be called up for the Registration [1]–[4] buttons.

4. On the Lower keyboard, play a chord.

At the moment you play the keyboard, the Intro will begin, and then the Rhythm and Automatic Accompaniment will play.

5. Press a Registration button from [1] through [4] to switch the panel settings.

6. To end the Music Assistant function, press the [One Touch Program] button, extinguishing its indicator.



■ Music Assistant Search

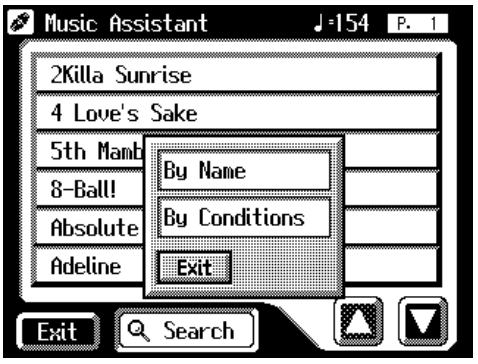
You can specify a song name and other search terms and use these for a Music Assistant search.

1. **Touch <MUSIC ASSIST> on the Main screen.**

The Music Assistant screen appears.

2. **Touch <Search> on the Music Assistant screen.**

A sub-window appears.



Searching by Music Assistant name

3. **Touch <By Name>.**

MEMO

If some other screen is displayed, touch <Exit> to close the currently open screen.

4. Decide which character you will use for the search.

The selected character appears in the middle of the screen.

Enter the character you are searching for. For example, touching <ABC> in succession cycles you through the available choices in that character group ("A"→"B"→"C"...).

Touch <ABC/123> to toggle between alphabets and numerals.

5. After setting the search terms, touch <Start> (Start Search).

The results of the search appear in the display.

To cancel the search, touch <Exit> in the Search Results screen.

6. Touch a Music Assistant name to select a Music Assistant.

Touch <Exit> to return to the Music Assistant screen.

Searching by conditions

3. Touch <By Conditions>.

You can use four different criteria in searches: "Tempo," "Rhythm," "Genre," and "Scene."

4. Touch the value for the search term.

5. Touch < − >< + > to adjust the settings.

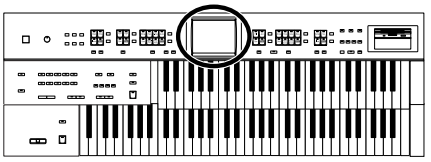
6. After setting the search terms, touch <Start> (Start Search).

The results of the search appear in the display.

To cancel the search, touch <Exit> in the Search Results screen.

7. Touch a Music Assistant name to select a Music Assistant.

Touch <Exit> to return to the Music Assistant screen.



About the Quick Guide function

The AT-45 offers a Quick Guide function, which makes it easy for you to access various functions. While the Quick Guide screen is displayed, you can press the keyboard, a button, or a foot switch to jump to the related setting screen.

1. Touch <Quick Guide> on the Main screen.

The following Quick Guide screen appears for several seconds.

2. While the Quick Guide screen is displayed, press a button, keyboard, pedal, or foot switch.

You will be taken to the screen that contains settings related to the button, keyboard, pedal, or foot switch that you pressed.

3. Make settings in the screen to which you jumped.

4. When you are finished making settings, touch <Exit> to close the screen.

The Main screen appears.

MEMO

If some other screen is displayed, touch <Exit> to close the currently open screen.

MEMO

For more on keys, buttons, and controllers that can be used with the Quick Guide function, refer to "List of Shortcuts" (p. 218).

■ About the Index menu

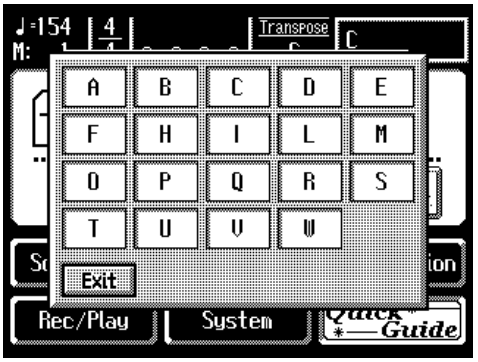
In the Quick Guide screen, you can touch <index> to access the Index Menu. In the Index Menu screen, you can touch a keyword to jump to the setting screen for that keyword.

1. Touch <Quick Guide> on the Main screen.

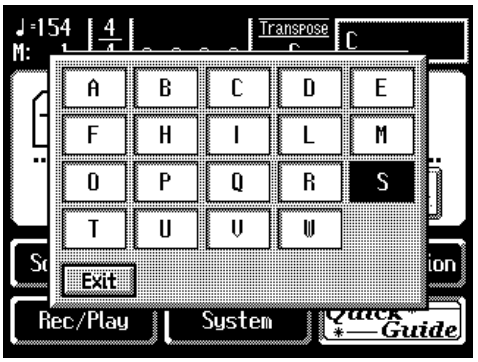
The following Quick Guide screen appears for several seconds.

2. While the Quick Guide screen is displayed, touch <index>.

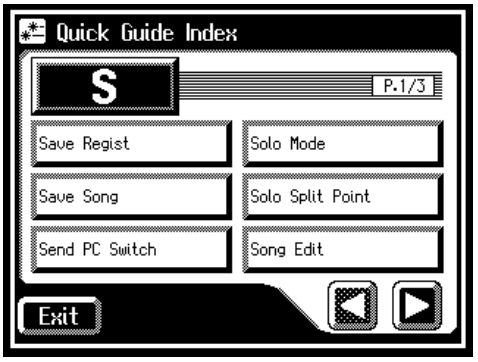
The following screen appears.



3. Touch a letter of the alphabet A–W to select the first letter of the desired keyword.



The Quick Guide Index screen appears, and the keywords will be displayed.



4. Touch the desired keyword.

The setting screen for the specified keyword appears.

5. Make settings in the setting screen that appeared.

6. Touch <Exit>.

The Main screen appears.

Chapter 1 Selecting and Playing Sounds

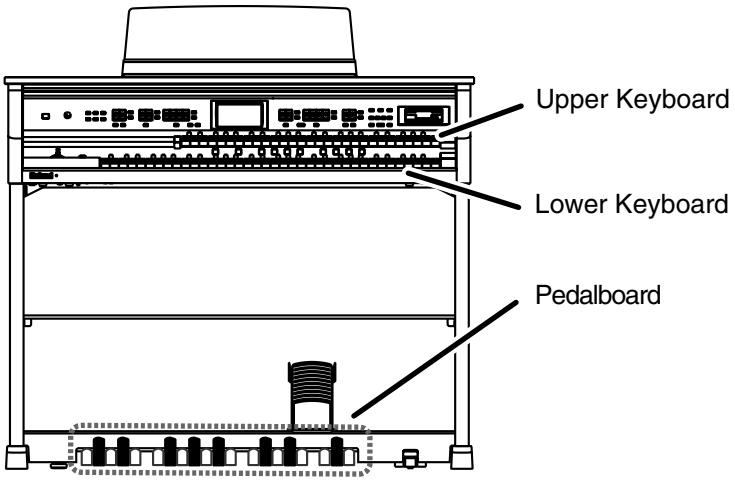
Selecting Voices

You can play the sounds of various instruments on the AT-45. These sounds are called "Voices."

■ About the Voices and Parts

The AT-45 has two manual keyboards and a pedalboard.

From top to bottom these are called the "Upper Keyboard," "Lower Keyboard," and "Pedalboard."



Two parts, "Organ" and "Orchestral," are assigned to the Upper and Lower keyboards, respectively, and you can select one voice from each part. Plus, with the addition of the "Solo" part voice, you can have up to three voices playing simultaneously (the Solo voice can be played in either the Upper or Lower keyboard).

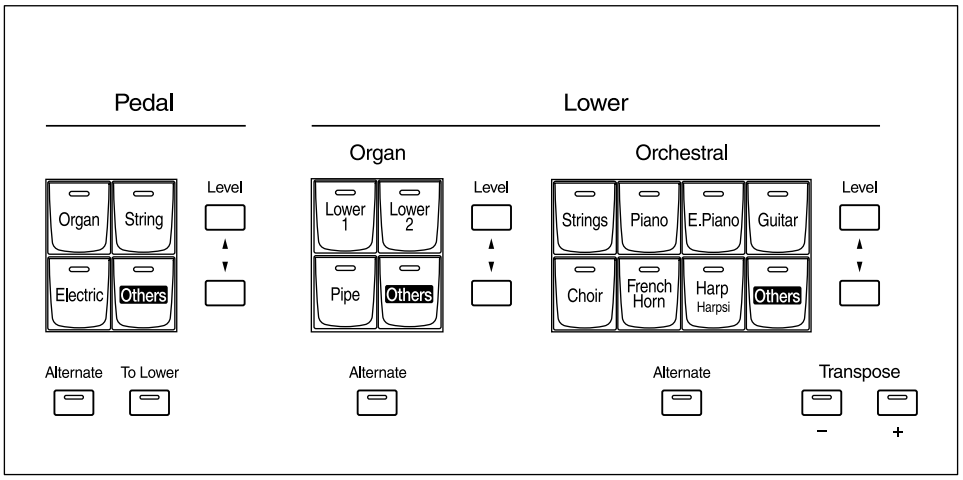
The Pedalboard has "Pedal" part.

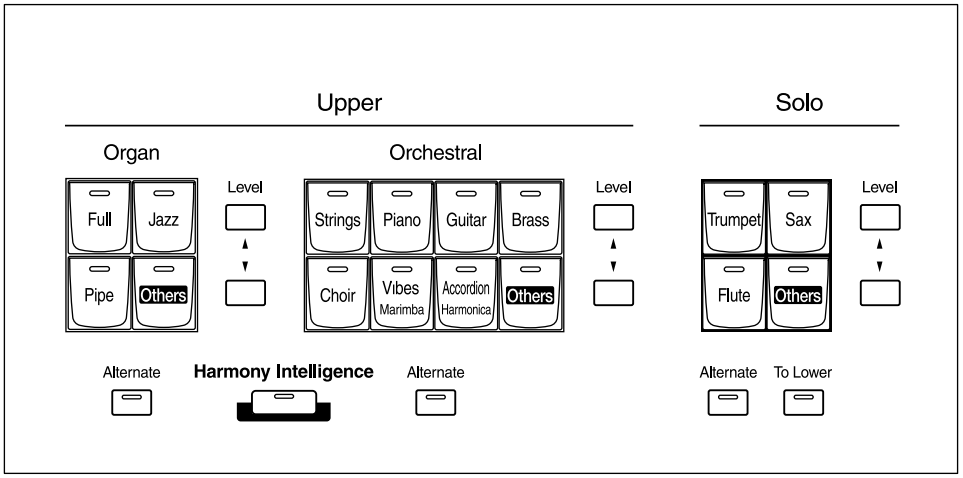
Keyboard	Parts
Upper Keyboard	Upper Organ
	Upper Orchestral
	Solo (This voice is sounded only when the Solo [To Lower] button be extinguished)
Lower Keyboard	Lower Organ
	Lower Orchestral
	Solo (This voice is sounded only when the Solo [To Lower] button lights up)
Pedalboard	Pedal

MEMO

To play a Solo voice on the Lower keyboard, select the Solo voice and press the Solo [To Lower] button (p. 124).

■ Functions of the Upper/Lower/Pedal Bass Sound Select Buttons





Each time you press a voice button, its indicator will switch between being lit and being turned off. Voices that have their button indicator lit can be played.

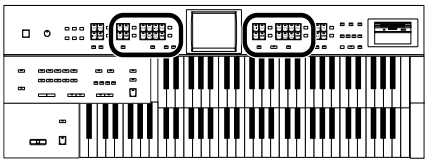
Two voices of the same family are assigned to each voice button. Buttons with voices from two different families have the names of both voices printed on them.

The [Alternate] button switches between these two voices.

The [Alternate] button	Voice that will be selected
The [Alternate] button is not lit.	The voice indicated on the button is selected.
The [Alternate] button is lit.	Another voice of the same family or the voice indicated on the bottom half of the button is selected.

NOTE

If none of the voice buttons are lit, playing the keyboard will not produce a sound.



■ Selecting the Upper and Lower Voices

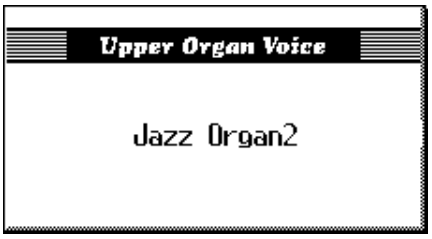
Press the "Organ," or "Orchestral" buttons for each Keyboard (Upper/Lower) to select the desired voice.

When the power is turned on, the Upper keyboard will play "Full Organ3" and the Lower keyboard will play "Lower Organ1."

Example: Selecting "ComboJazzOrg" for the Upper Organ, and "Grand Piano" for the Upper Orchestral.

1. Press the Upper Organ [Jazz] button (indicator lights).

The name of the selected voice appears in the display for several seconds.



Now when you play the Upper keyboard, the "Jazz Organ2" will sound.

2. Press the Upper Organ [Alternate] button (the indicator lights).

When you play the Upper keyboard, the "ComboJazzOrg" will sound.

Each time you press the [Alternate] button you will switch between the two voices which are assigned the button.

3. Press the Upper Orchestral [Piano] button (the indicator lights).

When you play the Upper keyboard, "Grand Piano" will be added, producing a mixture of two different voices.

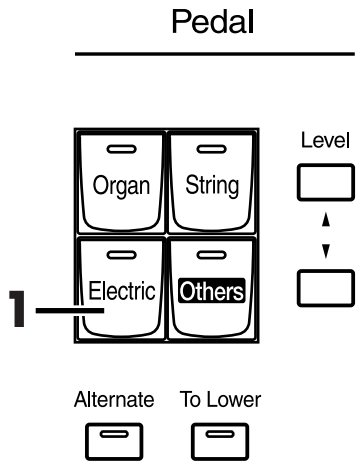
MEMO

The lower voice can be selected in the same way as the upper voice.

■ Selecting Pedal Bass Voice

Press the Pedal part buttons to select the voice.

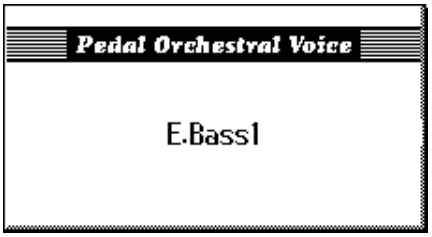
Immediately after the power is turned on, the Pedal Bass voice will sound single notes using the "Organ Bass1" voice.



Example: Select "E. Bass 1" for the Pedal part

1. Press the Pedal [Electric] button (indicator lights).

The name of the selected voice appears in the display for several seconds.



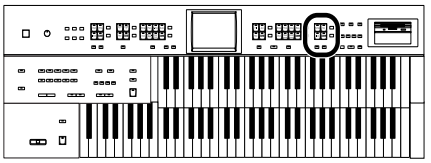
Now when you play the Pedalboard, "E. Bass 1" (Electric Bass 1) will be heard.

MEMO

Normally, playing the pedalboard will sound one note at a time. Settings can be adjusted to allow multiple notes to be played on the Pedalboard (p. 169).

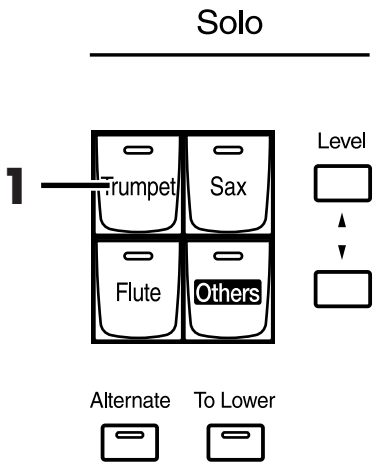
MEMO

If you press the Pedal [To Lower] button (indicator lights), the Pedal Bass voice can now be played by the Lower keyboard, not by the Pedalboard (p. 127).



■ Selecting Solo Voice

The Solo section of the Upper keyboard is monophonic, that is, the Solo voice will only sound for the highest note played on the Upper keyboard. This allows you to play full chords and have the selected Solo voice playing the highest (solo) note.



Example: Selecting "Trumpet" for the Solo part

1. Press the Solo [Trumpet] button (indicator lights).

The name of the selected voice appears in the display for several seconds.

Play the Upper keyboard. The selected voice will sound by the highest note played.

When you press the [Alternate] button, the two voices assigned to the button will alternate.

MEMO

By pressing the Solo [To Lower] button, you can play the Solo voice from the Lower keyboard.
For details refer to "Playing the Solo Voice on the Lower Keyboard (Solo [To Lower] Button)" (p. 124).

MEMO

It is possible to change how a Solo voice will sound. Normally, the Solo voice will be sounded by the highest note you play on the Upper keyboard, but you can make settings so that the last-played note will sound the Solo voice.
For details, refer to "Changing How the Solo Voice Responds" (p. 125).

■ Selecting a Voice Using the [Others] Button

Notice that there is an [Others] button for each part. By using the [Others] button, you can select all voices.

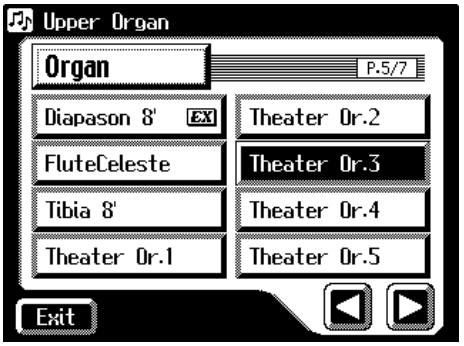
As with the other voice buttons, the [Others] button can be assigned two voices. You can use the [Alternate] button to switch between these two voices.

1. Press the [Alternate] button for the Part for which you wish to specify a voice to select ON (lit) or OFF (dark).

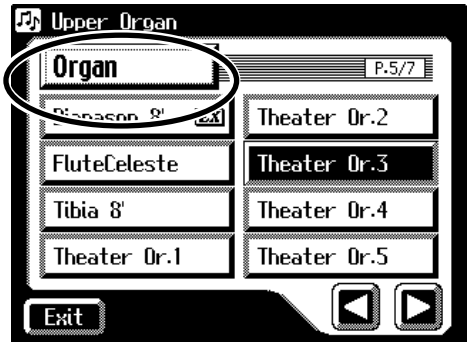
The setting of the [Alternate] button: ON (lit) or OFF (dark), determines to which of the two available locations a newly selected voice will be assigned.

2. Press the [Others] button for the Part for which you wish to specify a voice.

The Others Voice screen appears for several seconds.



3. Touch a button that shows a sound group.

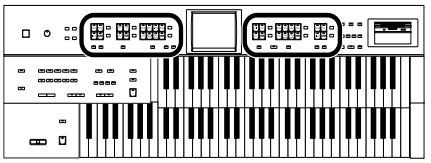


NOTE

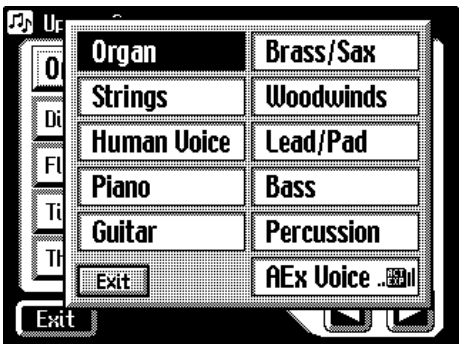
When you press the [Others] button, the Others Voice screen appears in the display screen, but the basic screen will reappear if you wait several seconds without touching the screen.
If you want to change the voice for the [Others] button, press the [Others] button once more, then select the voice by quickly touching the screen while the name of the voice appears in the display.

MEMO

A voice indicated by EX is called an "EX voice." These voices are especially recommended.



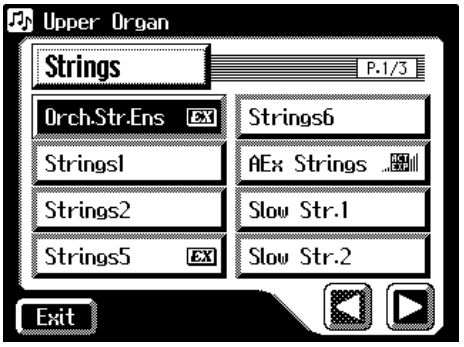
A sub-window appears, allowing you to select a sound group.



4. In the sub-window, touch a sound group name to select the desired sound group.

The indicator of the selected [Others] button will blink.

The Others Voice screen appears, showing the sounds of the specified sound group.



5. Touch <◀><▶> to switch screens, and touch a voice name to select a voice.

6. Once again, press the blinking [Others] button to confirm the voice.

The indicator of the [Others] button will change from blinking to lit.

MEMO

You can touch <AEx Voice> in the Voice Select screen to have only the Active Expression voices be displayed.
"Active Expression voices" can be assigned to the [Others] buttons of the Upper Orchestral part, Lower Orchestral part, Solo part, and Pedal part.
For more on the active expression voices, refer to "Performing with an Active Expression Voice" (p. 43).

MEMO

You can also confirm the voice by touching <Exit> in the Others Voice (Other Voice select) screen. You can also press the key for the part containing a changed voice to confirm the voice setting.

MEMO

For more information about the voices that can be assigned to an [Others] button, please refer to "Voice List" (p. 196).

■ Performing with a Human Voice

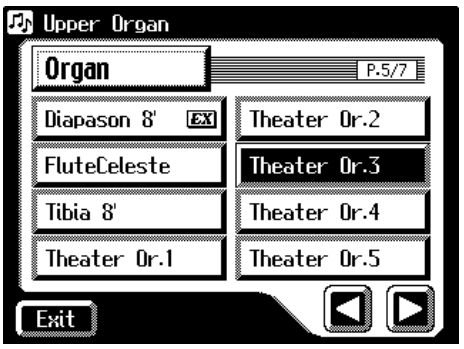
In addition to sounds such as organ and piano, you can also play "human voice," which produces a vocal-like sound.

1. Press the [Alternate] button to select ON (lit) or OFF (dark).

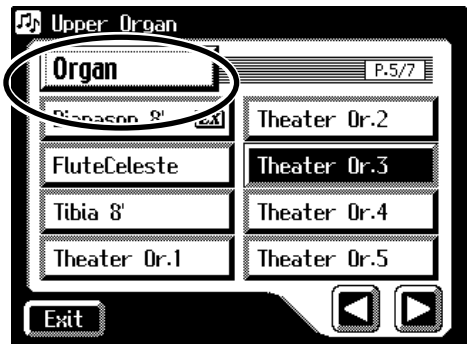
The setting of the [Alternate] button: ON (lit) or OFF (dark), determines to which of the two available locations a newly selected voice will be assigned.

2. Press the [Others] button for the Part for which you wish to specify a voice.

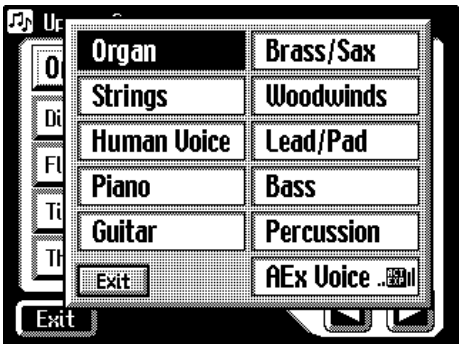
The Others Voice screen appears for several seconds.



3. Touch a button that shows a sound group.



A sub-window appears, allowing you to select a sound group.

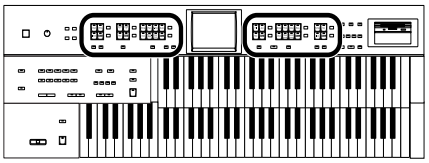


MEMO

For more information about the voices that can be assigned to an [Others] button, please refer to "Voice List" (p. 196).

NOTE

When you press the [Others] button, the Others Voice screen appears in the display screen, but the Main screen will reappear if you wait several seconds without touching the screen.
If you want to change the voice for the [Others] button, press the [Others] button once more, then select the voice by quickly touching the screen while the name of the voice appears in the display.

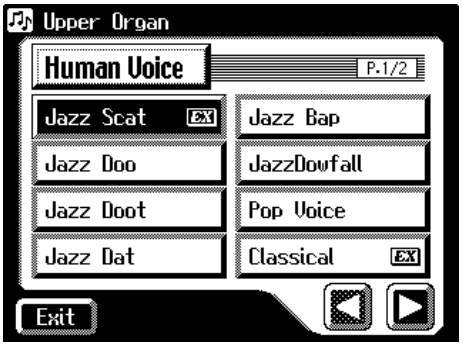


4. In the sub-window, touch <Human Voice>.

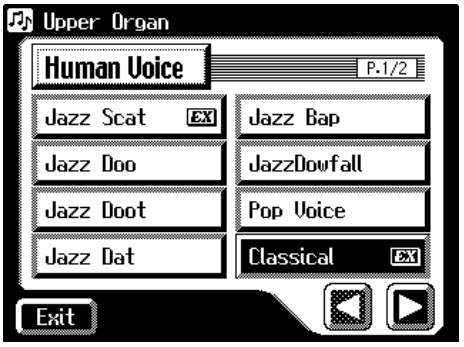
The indicator of the selected [Others] button will blink.

The Others Voice screen appears, showing the sounds of the Human Voice group.

The Others Voice screen will appear, and the sounds of the Human Voice group will appear.



5. Touch <◀><▶> to switch the screen, and touch a voice name to select the desired voice.



6. Once again, press the [Others] button for the part whose sound you wish to set to confirm the voice.

The indicator of the [Others] button will change from blinking to lit.

MEMO

For some human voices, such as "Jazz Scat," the sound will change depending on the strength at which you play the keyboard. If the Utility menu setting "Initial Touch" (p. 169) is "OFF," the sound will not change in response to the dynamics of your keyboard playing.

MEMO

You can also confirm the voice by touching <Exit> in the Others Voice (Other Voice select) screen. You can also press the key for the part containing a changed voice to confirm the voice setting.

■ Performing with an Active Expression Voice

Some voices are "Active Expression voices," for which advancing the expression pedal will not only vary the volume, but will also add other voices.

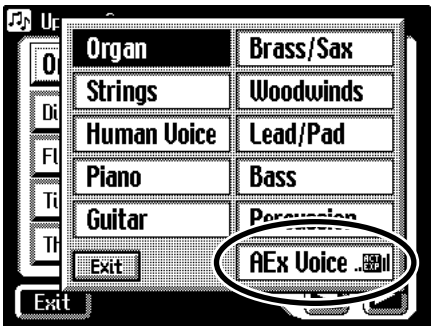
1. Touch the [Others] button of the Part to which you want to assign an Active Expression voice.

"Active Expression voices" can be assigned to the [Others] buttons of the Upper Orchestral part, Lower Orchestral part, Solo part, and Pedal part.

The Others Voice screens appears.

2. Touch a button that shows a sound group.

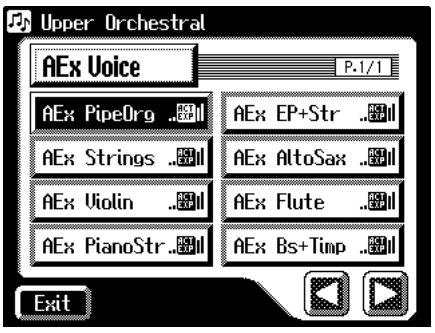
A sub-window appears, allowing you to select a sound group.



3. In the sub-window, touch <AEx Voice> (Active Expression Voice).

The indicator of the selected [Others] button will blink.

The Others Voice (Others Voice Select) screen appears, and only the Active Expression Voices from the entire collection are displayed.



4. Touch a voice name.

5. Once again, press the [Others] button for the part whose sound you wish to set to confirm the voice.

The indicator of the [Others] button will change from blinking to lit.
An active expression voice will be selected.

MEMO

For details on the active expression voices that are available, refer to "Voice list" (p. 196).

NOTE

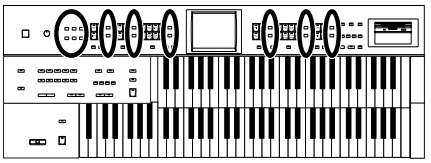
Although you can select an Active Expression voice with the [Others] button for parts other than Lower Orchestral, Upper Orchestral, Solo, and Pedal, no Active Expression effect is applied. The ACT EXP (Active Expression) icon does not appear when an Active Expression voice is selected for a part for which the Active Expression effect is not being used.

MEMO

Sounds marked by "ACT EXP" support the Active Expression function.

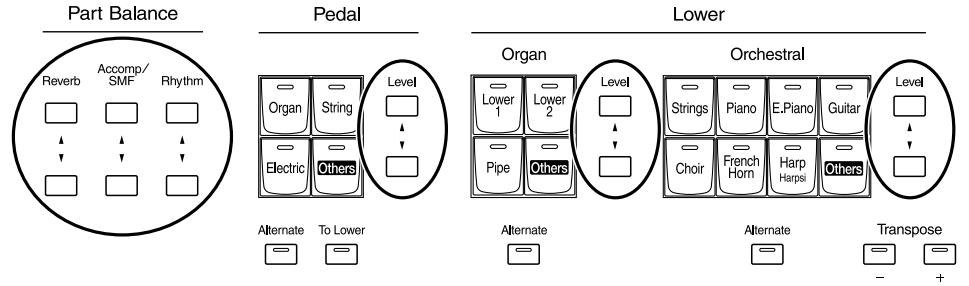
MEMO

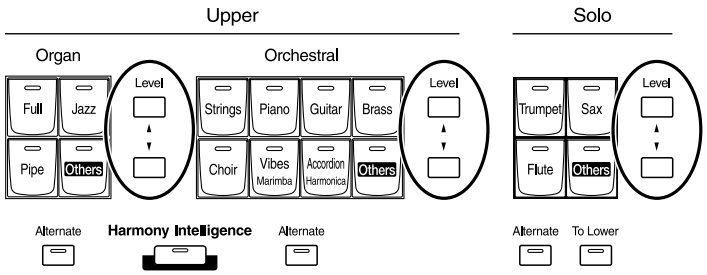
You can also confirm the voice by touching <Exit> in the Others Voice (Other Voice select) screen. You can also press the key for the part containing a changed voice to confirm the voice setting.



Adjust the Volume Balance

The AT-45 allows you to adjust the volume balance individually for each Part.





The following buttons are used to adjust the volume of a multiple number of Parts.

Button	Part
Accomp/SMF [▲] [▼] button	Automatic Accompaniment (except Bass)
	Playback of performance songs from something other than the Atelier performance songs (for example: SMF music files)
Rhythm [▲] [▼] button	Rhythm performance
	Drums/SFX
Pedal [▲] [▼] button	Pedal voice
	Bass note of automatic accompaniment

1. The volume levels of each part are adjusted using the corresponding [▲] and [▼] buttons.

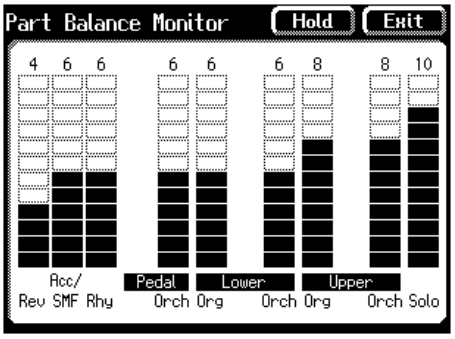
Pressing the upper button ([▲] button) will increase the volume.

Pressing the lower button ([▼] button) will decrease the volume.

The volume can be set to any value from 0 to 12.

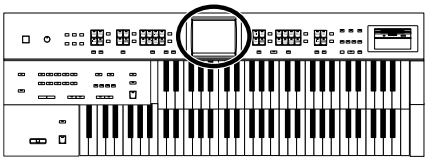
When the volume value shown in the display is 0, that part will produce no sound.

You can also press the [▲] button and [▼] button of the part whose volume you wish to adjust, so that the "Part Balance Monitor screen" is displayed for several seconds, allowing you to check the volume balance.



MEMO

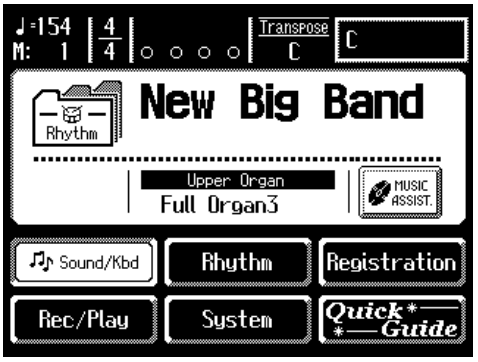
The Part Balance Monitor screen is displayed for several seconds and then closes automatically.
If you touch <Hold>, the screen continues to be displayed until you touch <Exit>.



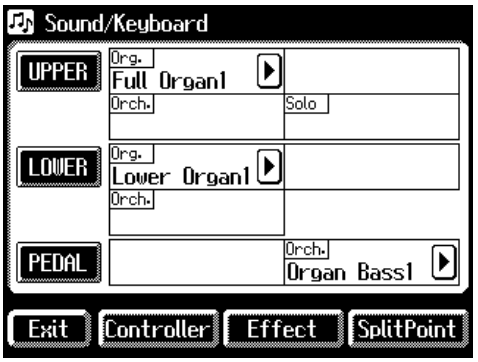
Transpose the Pitch in Octave Units (Octave Shift)

The pitch of the sound played by the keyboard can be adjusted in one-octave steps. This function is called "Octave Shift." You can apply an Octave shift to all Parts.

1. Touch <Sound/Kbd> on the Main screen.



The Sound/Keyboard screen appears.

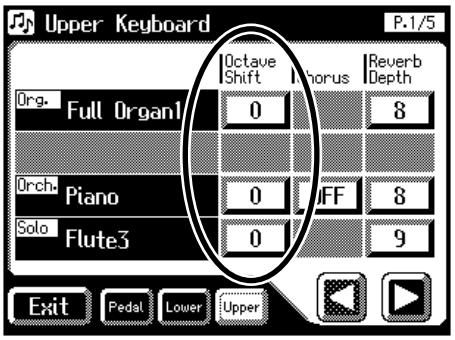


2. Touch either <UPPER>, <LOWER>, or <PEDAL>.

Menu	Part whose pitch will change
UPPER	To change the pitch of the Upper and Solo part
LOWER	To change the pitch of the Lower part
PEDAL	To change the pitch of the Pedal part

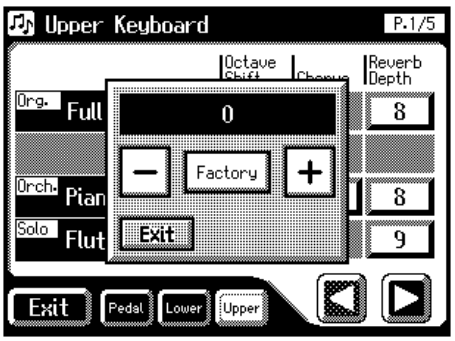
3. Touch <◀><▶> to display the Octave Shift.

4. **Touch the part display of the part whose Octave Shift settings you wish to change.**



5. **Touch <[−]><[+]> to adjust the settings.**

The value can be set to a range of +/- 3 octaves.



6. **Touch <Exit>.**

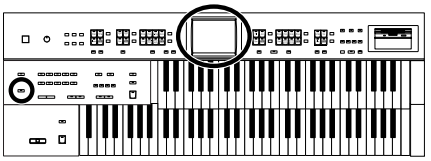
You will return to the Upper Keyboard/Lower Keyboard/Pedalboard screen.

MEMO

You can open the Pedalboard screen, Lower Keyboard screen, or Upper Keyboard screen with touching <Pedal>, <Lower>, and <Upper>.

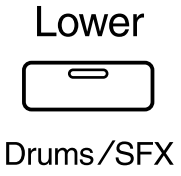
NOTE

Please note that when you apply the Octave Shift function to certain voices, their pitch could be stretched beyond their recommended note ranges, and they may not sound as expected. Care should be taken when using Octave Shift.



Playing Drum Sounds or Sound Effects from the Entire Lower Keyboard (Drums/SFX)

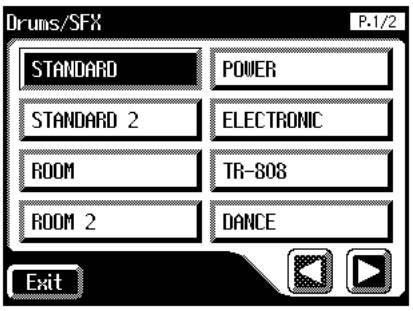
You can use the Lower keyboard to play various drum sounds (drum set). In this case, the Lower voices will no longer sound.



1. Press the [Drums/SFX] button, getting its indicator to light up.

The [Drums/SFX] button indicator will alternate between on (lit) and off (dark) each time it is pressed.

The Drums/SFX (drums/sound effects) screen will be displayed for several seconds.



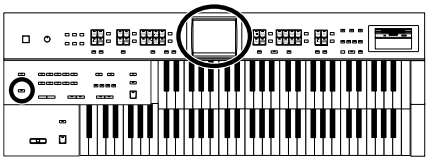
2. Play the Lower keyboard and listen to the various drum sounds on each key.

MEMO

Refer to "Drum Set List" (p. 198) for details on which drum sound or Sound Effect will be played by each note.

NOTE

For some drum sets, there will be keys that do not sound.



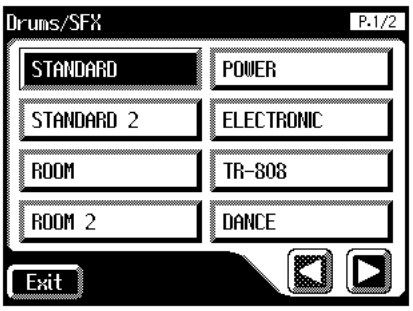
■ Changing Drums/SFX Sets

Immediately after the power is turned on, the STANDARD set will sound.

As the drum set, you can choose from 12 types of drum set and one type of sound effect. When you change the drum set, the sound produced by each note will change.

1. Press the [Drums/SFX] button, getting its indicator to light up.

The Drums/SFX screen will be displayed for several seconds.



2. While the Drums/SFX screen is displayed, touch a Drum/SFX set name in the screen.

The [Drums/SFX] button indicator will begin to blink.

You can select from 12 different Drum Sets and one set of Sound Effects as follows:

STANDARD, STANDARD2, ROOM, ROOM2, POWER, ELECTRONIC, TR-808, DANCE, JAZZ, BRUSH, BRUSH2, ORCHESTRA, SOUND EFFECTS

3. Press the [Drums/SFX] button once again.

The [Drums/SFX] button indicator will be lit constantly, and the selected Drum Set Type will be applied.

MEMO

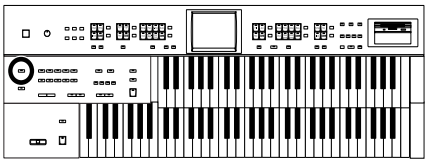
For the types of Drums/SFS set and the drum sounds played by each key, refer to “Drums/SFX set list” (p. 198).

NOTE

After the Drums/SFX (drums/sound effects) screen is displayed, it will close automatically after several seconds unless you touch the screen to select a drums/sound effects set. If you wish to switch drums/sound effect sets, quickly select the desired drums/sound effect set while the Drums/SFX (drums/sound effects) screen is displayed.

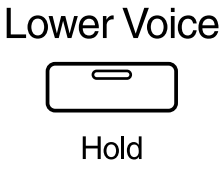
MEMO

You can also confirm the Drums/SFX set by touching <Exit> in the Drums/SFX screen.
You can also play the lower manual to confirm the drum set.



Sustaining Notes Played on the Lower Keyboard (Lower Hold)

When the Lower Voice [Hold] button is ON (Lower Voice [Hold] button's indicator is lit), the note(s) played on the Lower keyboard will continue to sound until you play the next note(s)—even if you release the keys you have played.



1. Press the Lower Voice [Hold] button (confirm that the indicator is lit).

The notes played on the lower keyboard will continue sounding.

While the Lower Voice [Hold] button is lit, pressing a key will cause the note to continue sounding.

2. When you press the Lower Voice [Hold] button to make the indicator go dark, the notes which had continued to sound will stop.

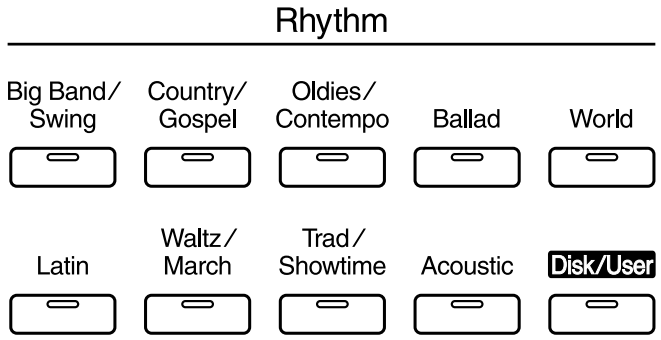
Chapter 2 Using Rhythm Performance

The AT-45 lets you enjoy playing along with a rhythmic accompaniment.

Selecting a Rhythm

The AT-45 provides various Rhythms and Automatic Accompaniments (Music Styles).

These are organized into 10 groups.



1. Press a Rhythm button to select a Rhythm group.

The indicator of Rhythm button will light.

A Rhythm screen like the following appears.

The rhythms in the selected rhythm group appears in the display.

2. Touch <◀><▶> to switch screens, and touch a rhythm name to select the desired rhythm.

The indicator of Rhythm button will blink.

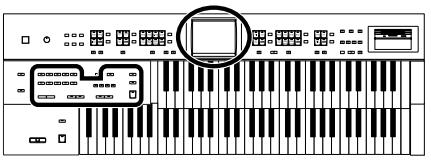
3. Press the Rhythm button once again (indicator lights constantly).

The Rhythm button's indicator will change from blinking to light.
The Rhythm has now been applied.

MEMO
For more on the internal rhythms, refer to the "Rhythm List" (p. 208).

MEMO
You can also open the Rhythm screen by touching <Rhythm> in the Main screen.

MEMO
You can also confirm the rhythm by touching <Exit> in the Rhythm screen.



■ Using Rhythms Stored in User Memory

The AT-45 features a User memory.

What is the User Memory?

The User memory is the area within the instrument where User rhythms you create as well as rhythms from Music Style Disks are stored.

You can also copy User rhythms (p. 158) saved on floppy disks to the User memory.

The AT-45 is shipped from the factory with rhythms already stored in User memory. You can replace these rhythms with rhythms loaded in from Music Style Disks, or with User rhythms you've created and saved using the Rhythm Customize function (p. 158).

The content of User memory is retained even while the AT-45's power is turned off.

You can call up rhythms in User memory by pressing the [Disk/User] button.

Calling Up Rhythms Stored in User Memory

1. Press the [Disk/User] button.

The Rhythm screen appears.

2. Touch <User> on the Rhythm screen.

The rhythms stored in User Memory are displayed.

3. Touch a rhythm name to select the desired rhythm.

The indicator of [Disk/User] button will blink.

4. After selecting a rhythm, press the flashing [Disk/User] button once more.

The [Disk/User] button stops flashing and remains lit, indicating that the rhythm has been selected.

MEMO

If you wish to store a disk Rhythm in the User memory, refer to "Copying Rhythms on Disks into User Memory" (p. 68).

MEMO

If you want to restore the original rhythms that User memory contained at the time the instrument was shipped from the factory, refer to "Restoring the Rhythm Stored in the User Memory to Their Original Factory Settings" (p. 70).

MEMO

If a floppy disk containing saved rhythms is in the disk drive, then when you touch <Disk>, the rhythms on the floppy disk are displayed.

MEMO

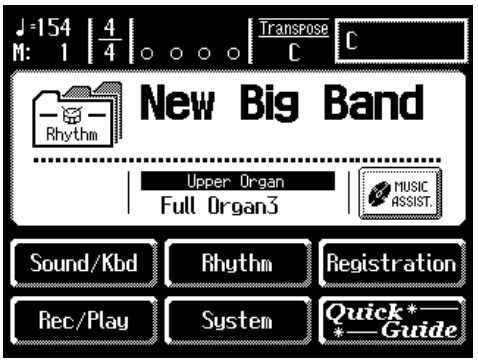
You can also confirm the rhythm by touching <Exit> in the Rhythm screen.

■ Rhythm Search

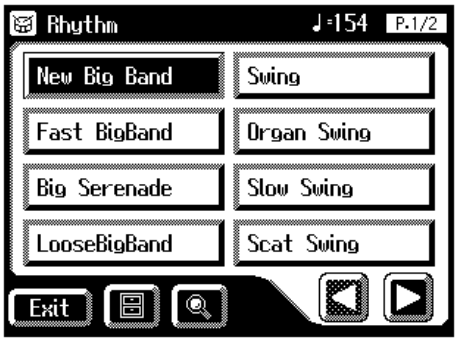
You can search for Rhythm that match the tempo of the song, musical genre, or other criteria you set.

You can also search Rhythm using the first character of the Rhythm names.

1. Touch <Rhythm> on the Main screen.

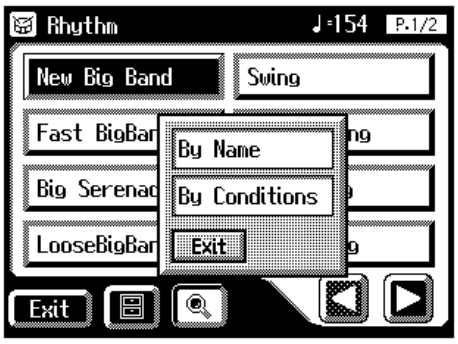


The following Rhythm screen appears.



2. Touch <🔍> on the Main screen.

A sub-window appears.



MEMO

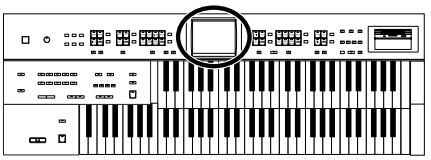
If some other screen is displayed, touch <Exit> to close the currently open screen.

MEMO

You can also open the Rhythm screen by pressing Rhythm buttons.

MEMO

You can also search only for rhythms other than the internal rhythms accessed with the [Disk/User] button. The 🔍 icon does not appear in the display while [Disk/User] button rhythms are displayed.



Searching by Rhythm name

3. Touch <By Name>.

4. Decide which character you will use for the search.

The selected character appears in the middle of the screen.

Enter the character you are searching for. For example, touching <ABC> in succession cycles you through the available choices in that character group ("A"→"B"→"C"...).

Touch <ABC/123> to toggle between alphabets and numerals.

5. Touch <Start> (Start Search).

The search results appear in the display.

To cancel the search, touch <Exit> in the Search Results screen.

6. Touch a Rhythm name to select a Rhythm.

Touch <Exit> to return to the Rhythm screen.

Searching by Conditions

3. Touch <By Conditions>.

You can use four different criteria in searches: "Tempo," "Beat," "Groove," and "Genre."

4. Touch the value for the search term.

5. Touch <[−]><[+]> to adjust the settings.

6. After setting the search terms, touch <Start> (Start Search).

The search results appear in the display.

To cancel the search, touch <Exit> in the Search Results screen.

7. Touch a Rhythm name to select a Rhythm.

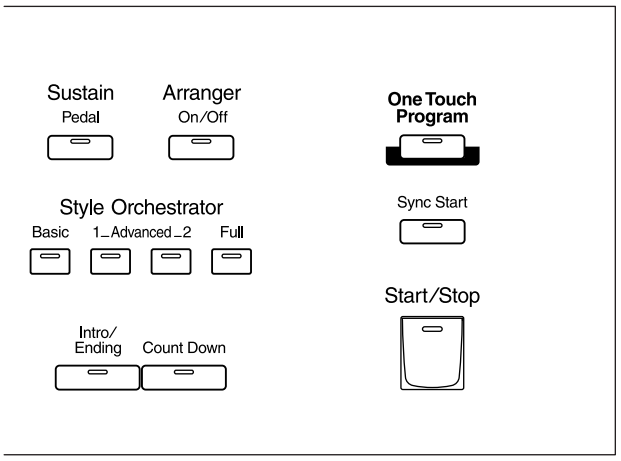
Touch <Exit> to return to the Rhythm screen.

Playing Rhythm

There are two ways to start the Rhythm:

- Manually by pressing the [Start] button,
- Automatically by playing a note on the Lower keyboard or Pedalboard (Sync Start).

You can press (Sync Start) or the [Intro/Ending] button to start the rhythm from the intro, or stop the rhythm at the ending.



MEMO

The functions of the [Intro/Ending] button and [Start/Stop] button can be assigned to the foot switches located on each side of the Expression Pedal (p. 105).

■ Starting at the Press of a Button

Starting with an Added Intro

1. Press the [Intro/Ending] button.

The Intro is played and the Rhythm starts.

While the Intro is playing, the [Intro/Ending] button indicator will light, until the Intro ends then the button indicator will go dark.

Making the Intro Short and Simple

1. Press the [To Variation] or [To Original] button.

[Start/Stop] button indicator will blink.

The indicator for the [To Variation] or [To Original] button will blink.

2. Press the [Start/Stop] button.

A short Intro is played and the Rhythm starts.

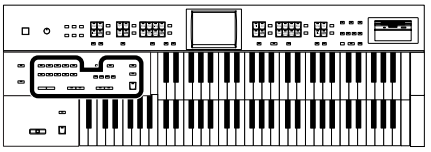
MEMO

For more on the [To Variation] and [To Original] buttons, refer to "Adding Variety to the Rhythm or Automatic Accompaniment" (p. 59).

Starting Without an Intro

1. Press the [Start/Stop] button.

The Rhythm starts without an Intro being played.



■ Starting the Rhythm Automatically When You Play the Lower Keyboard or Pedalboard (Sync Start)

Starting with an Added Intro

1. Press the [Sync Start] button to make the indicator light up.

2. Press the [Intro/Ending] button.

The [Intro/Ending] button's indicator will blink.

3. Play either the Lower keyboard or the Pedalboard.

The Intro is played and the Rhythm starts.

While the Intro is playing, the [Intro/Ending] button indicator will light, until the Intro ends then the button indicator will go dark.

Making the Intro Short and Simple

1. Press the [Sync Start] button to make the indicator light up.

2. Press the [To Variation] or [To Original] button.

[Start/Stop] button indicator will blink.

The indicator for the [To Variation] or [To Original] button will blink.

3. Play either the Lower keyboard or the Pedalboard.

A short Intro is played and the Rhythm starts.

Starting Without an Intro

1. Press the [Sync Start] button to make the indicator light up.

2. Play either the Lower keyboard or the pedalboard.

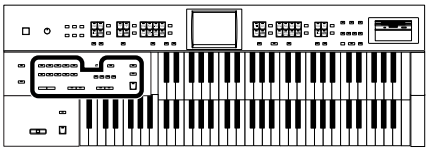
The Rhythm starts without an Intro being played.

NOTE

If the Arranger function is ON (the Arranger [On/Off] button indicator is lit), it is not be able to start the Rhythm by playing the Pedalboard (p. 58).

MEMO

For more on the [To Variation] and [To Original] buttons, refer to "Adding Variety to the Rhythm or Automatic Accompaniment" (p. 59).



■ Stopping the Rhythm

Stopping with an Ending

1. Press the [Intro/Ending] button.

An Ending is played, then the Rhythm stops.

While the Ending is playing, the [Intro/Ending] button indicator will light, until the Ending finishes the button indicator will be turned off.

Making the Ending Short and Simple

1. Press the [To Variation] or [To Original] button, and then press the [Start/Stop] button.

A short Ending is played, then the Rhythm stops.

Stopping without an Ending

1. Press the [Start/Stop] button.

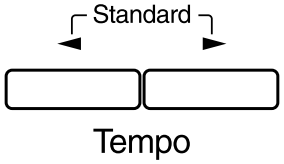
The Rhythm stops without an Ending being played.

MEMO

The functions of the [Intro/Ending] button and [Start/Stop] button can be assigned to the foot switches located on each side of the Expression Pedal (p. 105).

Changing a Rhythm's Tempo

You can change the tempo of the Rhythm or Automatic Accompaniment (p. 58).



1. Press the Tempo [◀] and [▶] buttons to change the tempo (speed) of the Rhythm or Automatic Accompaniment.

Tempo [◀] button	The tempo becomes slower
Tempo [▶] button	The tempo becomes faster

By pressing the Tempo [◀] and[▶] buttons simultaneously, the tempo is returned to the standard (preset) tempo for the selected Rhythm.

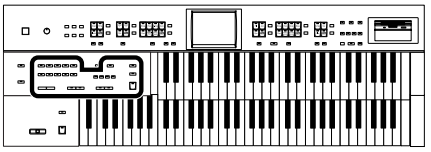
The value of the tempo currently set (20–500 beats per minute) can be checked in the Main screen and Rhythm screen.

MEMO

If you switch rhythms when "Auto Std Tempo (Auto Standard Tempo)" (p. 173) is on, the tempo changes to match the rhythm. If you switch rhythms when "Auto Std Tempo" is off, the tempo remains unchanged even when you switch the rhythm.

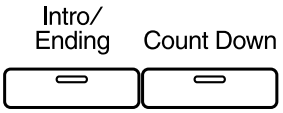
MEMO

The tempo and time signature are also indicated by the "bouncing ball" in the Main screen (p. 22).



Playing the Count Sound at the End of the Intro

If an intro is played before your performance, you can have a countdown played to the end of the intro, allowing you to understand easily where you are to start playing.



1. Press the [Count Down] button, getting the indicator to light.

2. Press the [Intro/Ending] button.

The intro plays, and a countdown plays to the end of the intro.

When the [Sync Start] button is lit, specifying the chord on the Lower keyboard starts the intro, and again, a countdown is given.

3. To stop the countdown, press the [Count Down] button, turning off the indicator light.

MEMO

You can change the countdown sound (p. 173).

Playing Rhythm and Automatic Accompaniment

The Arranger function of the AT-45 can add an Automatic Accompaniment to each Rhythm. Based on the selected Rhythm, the Arranger function automatically adds an accompaniment that is suitable for the chord being pressed on the Lower keyboard.

1. Press the Arranger [On/Off] button (indicator lights.)

Arranger [On/Off] button	Function
Indicator is lit (On)	Rhythm and Automatic Accompaniment
Indicator is not lit (Off)	Rhythm (Drums only)

2. Start the rhythm (p. 55).

The rhythm and the automatic accompaniment will play together.

If the Arranger [On/Off] button is ON and no Pedal Bass voice is selected, the Automatic Accompaniment will play the bass sound.

NOTE

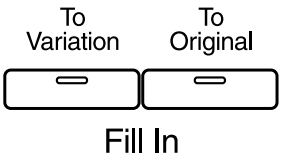
When the Arranger [On/Off] button is on, Sync Start (p. 56) on the pedalboard cannot be used.

NOTE

During the intro or ending, playing the lower keyboard will not produce sound.

Adding Variety to the Rhythm or Automatic Accompaniment

You can add variety to the rhythm or automatic accompaniment by changing the rhythm pattern of the rhythm or the arrangement of the automatic accompaniment.



Button name	Function
Fill In [To Variation] button	After the Fill-In has played, play the Variation Rhythm pattern.
Fill In [To Original] button	After the Fill-In has played, play the Original Rhythm pattern.

What's a fill-in?

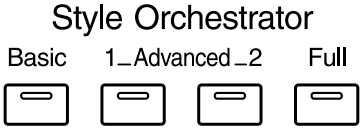
A Fill In is a short phrase that is inserted at a break in the melody or at a point where the character of the song changes (between Chorus's or Verses).

MEMO

The functions of the Fill In [To Variation] button and Fill In [To Original] button can be assigned to the foot switches located on each side of the Expression Pedal. Please refer to "Changing the Function of the Foot Switch" (p. 105).

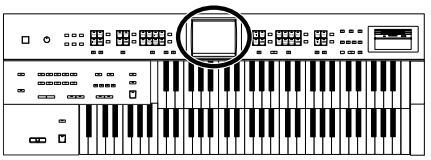
■ Changing the Arrangement of the Accompaniment (Style Orchestrator)

You can change the arrangement of the accompaniment. This function is called "Style Orchestrator." For each rhythm, there are four types of arrangement for the accompaniment.
The following buttons are called Style Orchestrator buttons.



1. Press the Style Orchestrator buttons to change the arrangement of the accompaniment.

The indicator of the button you pressed will light.
The [Basic] button produces the simplest arrangement, and the [Full] button produces the most florid.



Playing Chords with Simple Fingering

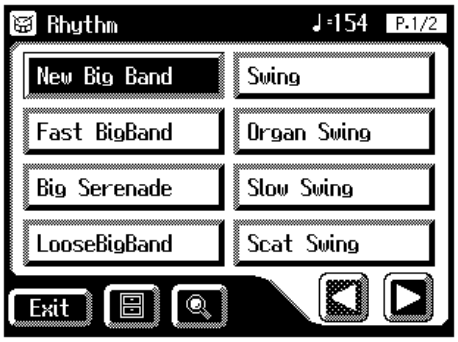
"Chord Intelligence" is a feature that intelligently plays the correct accompaniment chords the moment you play a key specifying a chord on the Lower keyboard during Automatic Accompaniment.

For example, in order to make the instrument detect a "C Major" chord, you must normally play the three keys "C," "E," and "G." If you use the Chord Intelligence function, you can simply press a single "C" key in the lower keyboard to sound a C Major chord with the voice selected for the Lower part.

MEMO
For more information about chord fingering, refer to the "Chord List" (p. 210).

1. Touch <Rhythm> on the Main screen.

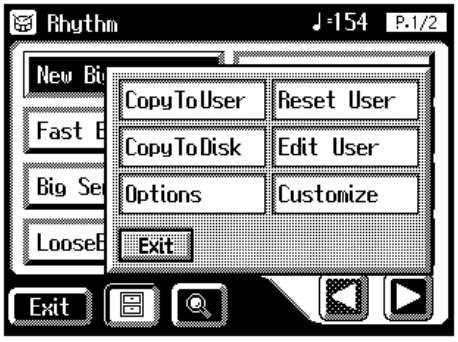
The Rhythm screen appears.



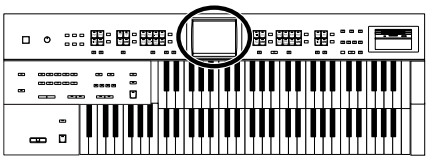
MEMO
You can also open the rhythm screen by pressing a Rhythm button.

2. Touch < > (Utility) on the Rhythm screen.

The Utility screen appears.

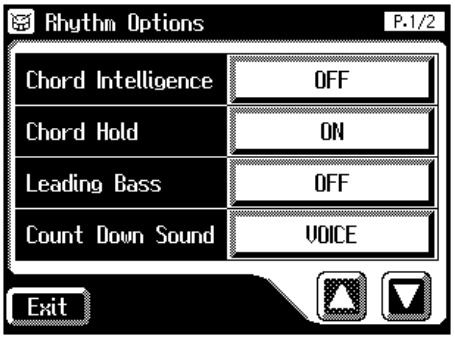


MEMO
If you press the root note of the chord (p. 212) in the lower keyboard when the Chord Intelligence function is on, all notes in that chord will sound.
For example, if you press the root "C" of the C major chord in the lower keyboard, the notes of the C major chord "C," "E," and "G" will be sounded by the voice selected for the lower part.



3. **Touch <Options>.**

The Rhythm Options screen appears.



4. **Touch the Chord Intelligence setting to turn it "ON."**

The Chord Intelligence function can now be used.

Each time you touch the Chord Intelligence setting, it will be switched ON/OFF.

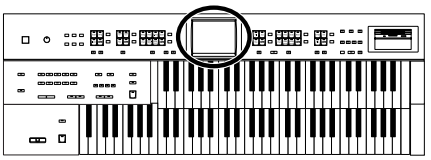
5. **If you wish to turn off the Chord Intelligence function, switch it "OFF."**

MEMO

When the Leading Bass function (p. 62) is on and the Chord Intelligence function is off, you can specify chords with a combination of the lower keyboard and pedalboard.

MEMO

When you touch the [One Touch Program] button, the Chord Intelligence setting will automatically be turned ON.



Leading Bass Function

When Automatic Accompaniment is used, and the Pedal [To Lower] button is ON, the Pedal Bass voice will normally play the root note (p. 212) of the chord you play on the Lower keyboard.

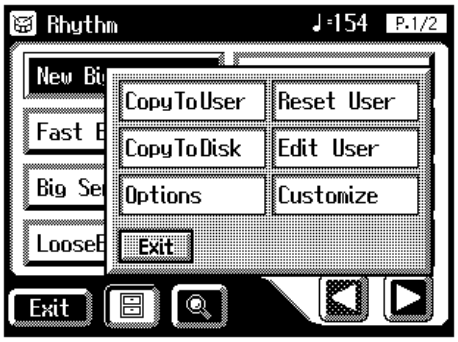
If the Leading Bass function is enabled, the lowest note of the chord you play on the Lower keyboard will then be used as the bass note (the bottom note of the chord). This allows the bass to be a note other than the root of the chord you play and the bass note will change when inverted chords are played (p. 212).

1. Touch <Rhythm> on the Main screen.

The Rhythm screen appears.

2. Touch < > (Utility) on the Rhythm screen.

The Utility screen appears.



MEMO

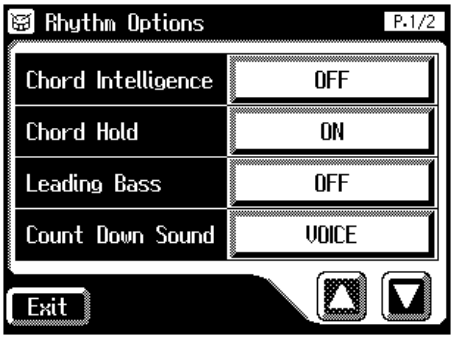
You can also open the Rhythm screen by pressing the Rhythm buttons.

MEMO

When the Leading Bass function is on and the Chord Intelligence function (p. 60) is off, you can specify chords with a combination of the lower keyboard and pedalboard.

3. **Touch <Options>.**

The Rhythm Options screen appears.



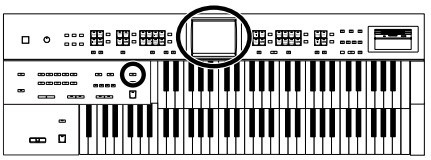
4. **Touch the Leading Bass setting to turn it "ON."**

Each time you touch the Leading Bass setting, it will be switched ON/OFF.

5. **To turn off the Leading Bass function, set the Leading Bass setting to "OFF."**

MEMO

You can assign the Leading Bass functions to either of the foot switches located on each side of the Expression Pedal. Please refer to "Changing the Function of the Foot Switch" (p. 105).



A Simple Way to Make Automatic Accompaniment Settings (One Touch Program)

The AT-45 provides a very convenient [One Touch Program] button. By simply pressing this button once, the Arranger function will be turned ON, and keyboard voices that are most appropriate for playing with the currently selected Rhythm/Automatic Accompaniment are selected.

By pressing the [One Touch Program] button, you can make the following settings.

- Panel settings (e.g., voices and volume) suitable for the rhythm
- Arranger [On/Off] button lit (Automatic Accompaniment playing)
- [Sync Start] button lit, [Intro/Ending] button blinking (Waiting for Sync Start)
- Chord Intelligence function is ON (p. 60)

What is Sync Start?

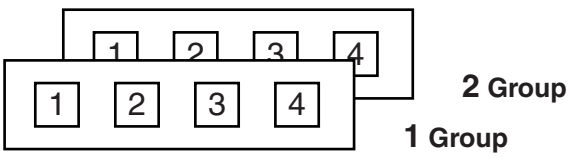
Sync Start is a function that starts the rhythm at the moment that you play the lower keyboard.

What is Chord Intelligence?

"Chord Intelligence" is a feature that intelligently decides on accompaniment chords the moment you play some keys specifying a chord during automatic accompaniment.

The panel settings specified by the One Touch Program function are as follows.

8 panel settings for each rhythm (4 panel settings x 2 groups)



1. Select a Rhythm (p. 55).

2. Press the [One Touch Program] button.

The [One Touch Program] button's indicator will light.

An One Touch Program Group (One Touch Program Group select) screen like the one shown below will be displayed for several seconds.

3. While the One Touch Program Group screen is displayed, touch the screen to select a One Touch Program group.

If you fail to select a One Touch Program group while the One Touch Program Group screen is displayed, "Group 1" will be selected automatically.

Panel settings appropriate for the rhythm and automatic accompaniment will automatically be called up for Registration [1]–[4] buttons.

4. Press the Registration [1] – [4] button to select panel settings.

5. On the Lower keyboard, play a chord.

At the moment you play the lower keyboard, the Intro will begin, and then the Rhythm and Automatic Accompaniment will play.

6. Press the [Intro/Ending] or [Start/Stop] button to stop the Rhythm.

Rhythm and Automatic Accompaniment stops.

7. Press the [One Touch Program] button, extinguishing its indicator.

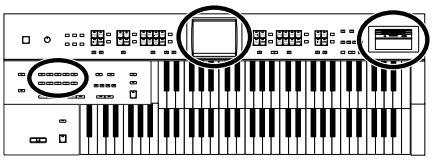
You will return to the panel settings that were in effect prior to pressing the [One Touch Program] button.

MEMO

To redisplay the One Touch Program Group screen, while holding down the Registration [Write] button, press the [One Touch Program] button.
Touch the One Touch Program Group screen to reselect the group.

MEMO

When you press the [One Touch Program] button, the "Arranger Update" setting will automatically change to "INSTANT" (p. 174).



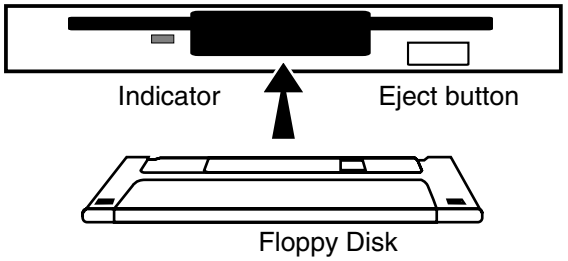
Using a Rhythm from a Disk

The AT-45 contains built-in Rhythms (Music Styles). Additional Rhythms (Music Styles) are available on the Music Style disk included are available. Here's how to select a Rhythm (Music Style) from a Music Style disk.

■ Inserting and Ejecting a Floppy Disk

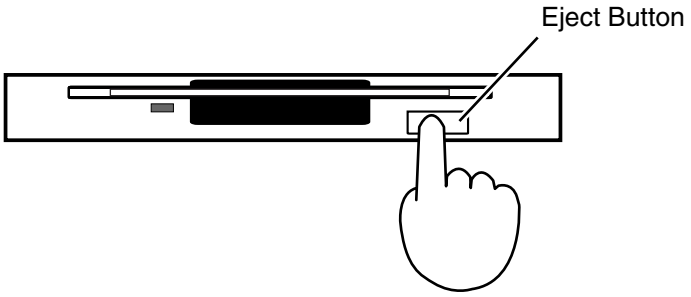
1. Hold the floppy disk face up, and push it into the disk drive until it clicks into place.

The disk drive is on the right side of the unit, above the keyboard.



2. Press the Eject button.

The end of the floppy disk comes out of the slot. Gently grasp the end of the floppy disk and pull it out.

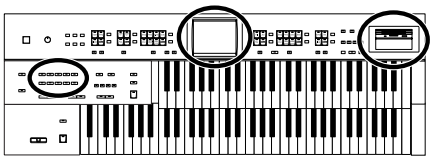


NOTE

If you're using the disk drive for the first time, be sure to read the important notes on p. 6.

NOTE

Never eject a disk while reading or writing is in progress, since that can damage the magnetic surface of the disk, rendering it unusable. (The disk drive's indicator will light up at full brightness when the drive is busy reading or writing data. Ordinarily, the indicator will be less brightly lit, or be extinguished.)



■ Reviewing the Styles on a Music Style Disk

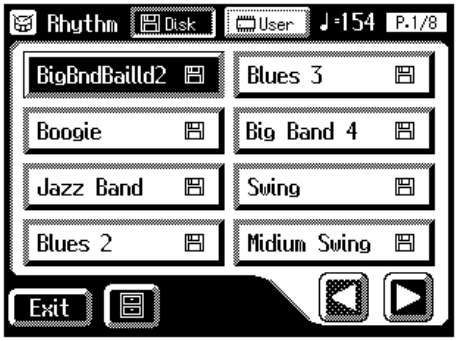
1. Press the Rhythm [Disk/User] button (confirm that its indicator is lit).

The Rhythm screen appears.

2. Insert the Music Style disk into the disk drive.

The Rhythm screen will show the Rhythms on the music style disk.

Rhythms from the music style disk are indicated by an "💾" icon.



3. Touch <Disk>, causing it to light up; the rhythms on the music style disk are displayed.

4. Touch the Rhythm screen to select a Rhythm on the Music Style disk.

The [Start/Stop] button indicator will blink while the Rhythms are being loaded into internal memory.

When loading is finished, you will be able to play the selected rhythm.

5. Press the [Start/Stop] button or the [Intro/Ending] button.

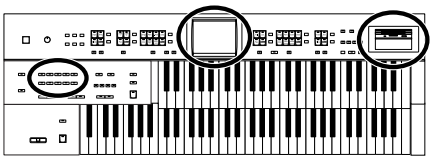
The selected Rhythm is played.

MEMO

When <User> is lit, the rhythms stored in User memory (p. 52) are displayed.

MEMO

If rhythms from a music style disk are stored in internal memory (p. 52), you can recall the Rhythms simply by pressing the [Disk/User] button (p. 68).



Copying Rhythms on Disks into User Memory

While the AT-45 comes with rhythms already stored in its User memory (p. 52), you can replace these with Music Style Disk rhythms. Rhythms loaded from the floppy disk into User memory will not be lost even if the power is turned off. It is convenient to load frequently-used disk Rhythms into User memory.

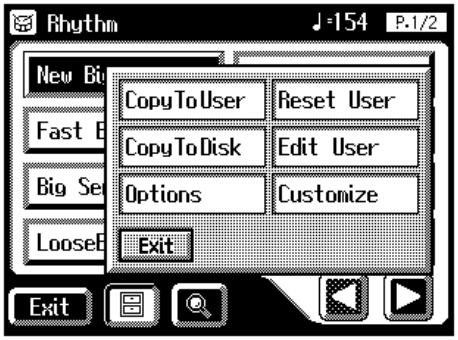
1. Insert the Music Style disk into the disk drive.

2. Touch <Rhythm> on the Main screen.

The Rhythm screen appears.

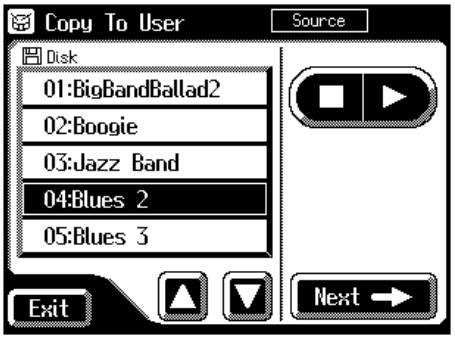
3. Touch < > (Utility) on the Rhythm screen.

The Utility screen appears.



4. **Touch <Copy to User>.**

The Copy To User screen appears.

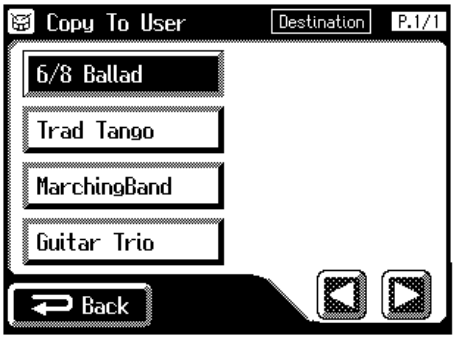


5. **Touch <▲><▼> to select the Music Style Disk rhythm you want to copy to the User memory.**

Rhythm [Disk/User] button indicator will blink.

6. **After selecting the Music Style Disk Rhythm, touch <Next>.**

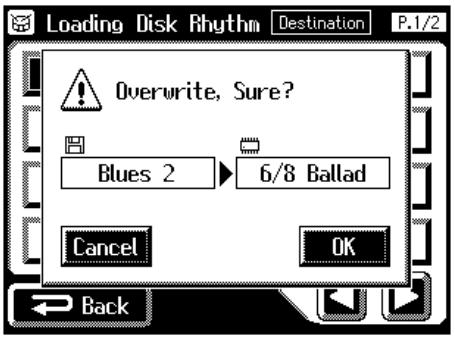
The following screen appears.



Touch <Back> to go back to the previous screen.

7. **Touch the save-destination rhythm.**

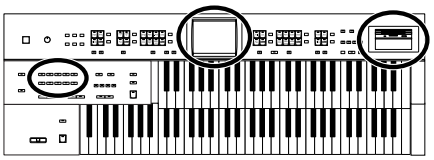
The following screen appears.



To cancel operation, touch <Cancel>.

MEMO

At this time, you can press <▶> or the [Start/Stop] button to play the rhythm to make sure of your choice.



8. **To store the Rhythm in User memory, touch <OK>.**

The saving of the rhythm to User memory begins.

Once the Rhythm has been accommodated in memory, the Rhythm screen will reappear.

NOTE

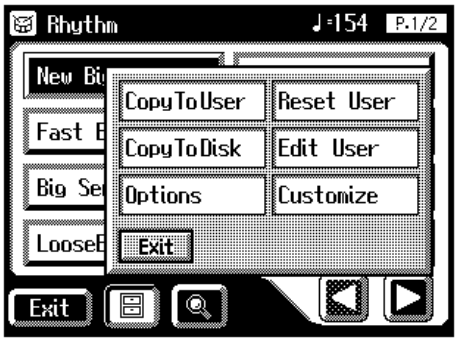
Never remove the disk or turn off the power while the Rhythm data is being loaded from disk into the AT-45. If you do so, the Rhythm data will not be loaded into the AT-45, and malfunctions could result. After returning the Rhythm stored in the [Disk/User] button to the factory settings (see following section), re-load the Rhythm from disk.

Restoring the Rhythm Stored in the User Memory to Their Original Factory Settings

Use the following procedure to restore only the rhythm stored in the User Memory to their factory settings.

1. **Touch <Rhythm> on the Main screen.**

2. **Touch < > (Utility) on the Rhythm screen.**



3. **Touch <Reset User> on the Sub-window.**

The confirmation message appears on the screen.

4. **Touch <OK>.**

The Rhythm that had been stored in the User Memory button will return to the factory settings.

MEMO

To restore all of the factory settings, use the Factory Reset operation (p. 19).

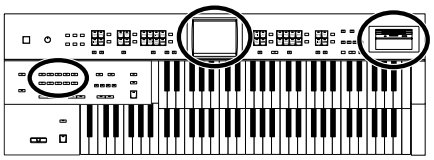
MEMO

You can restore the User Memory to the factory settings by using the following method.

1. **Press the [Power On] button to turn off the power.**
2. **Hold down the Rhythm [Disk/User] button, and press the [Power On] button.**

   Never turn off the power while the following screen is displayed.

The Rhythm that had been stored in the User Memory will return to the factory settings.



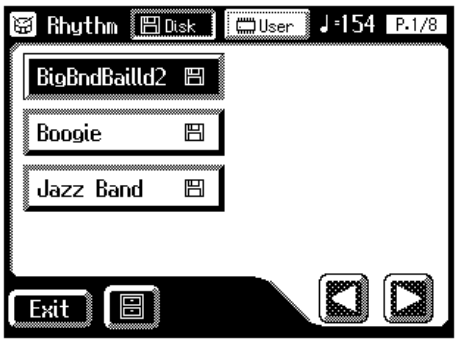
Copying Rhythms Saved in User Memory to Floppy Disks

You can take rhythms saved in User memory (p. 52) and copy them to floppy disks.

1. Make sure that the disk drive contains a disk that was formatted (p. 86) by the AT-45.

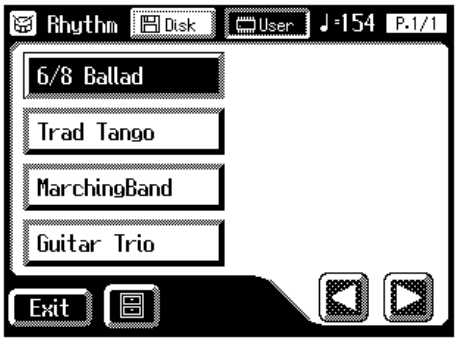
2. Press the Rhythm [Disk/User] button.

The Rhythm screen appears.



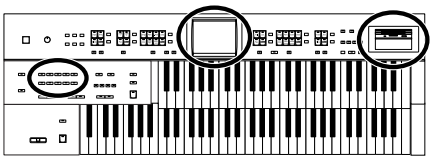
3. Touch <User>.

4. Touch the Rhythm name to select the rhythm you want to copy to the floppy disk.



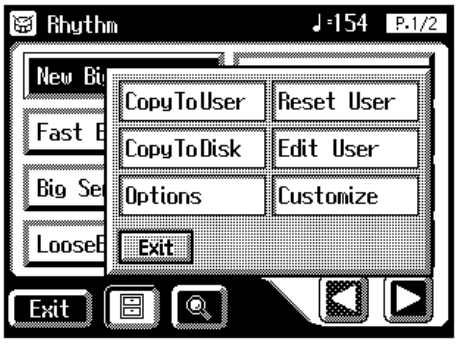
MEMO

When <Disk> is lit, the rhythms stored on the floppy disk are displayed.



5. **Touch <[Utility]> (Utility) on the Rhythm screen.**

The Utility screen appears.

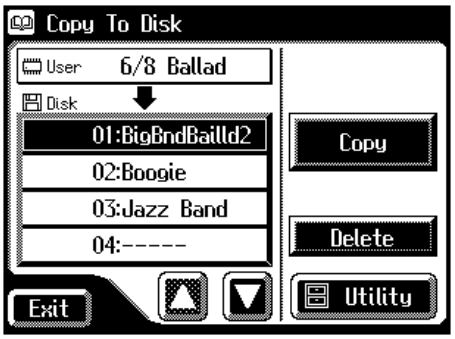


6. **Touch <Copy to Disk>.**

The Copy to Disk screen appears.

7. **Touch <[▲]><[▼]> to select the copy-destination number.**

Numbers which have not been used in the saving operation will be displayed as "- - - - -."



To cancel the copy, touch the <Exit> button to close the Copy to Disk screen.

8. **Touch <Copy> to copy the rhythm to the floppy disk.**

Copying of the rhythm to the floppy disk begins.

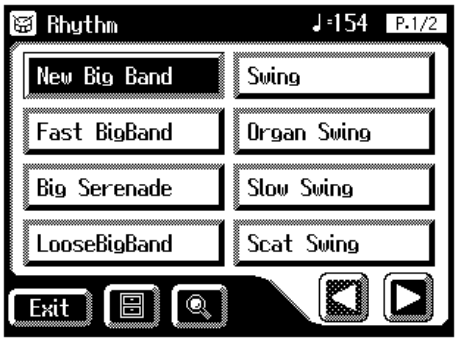
When the rhythm is saved, the Rhythm screen returns to the display.

Changing the Order of the Rhythms Stored in User Memory

You can rearrange the order of the rhythms stored in User memory (p. 52).

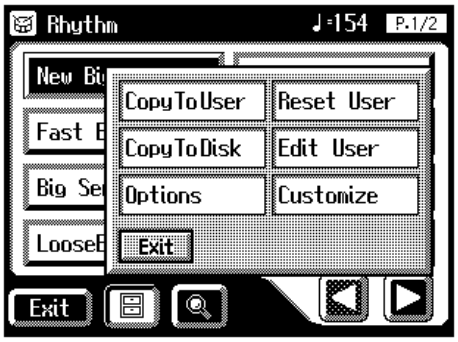
1. Touch <Rhythm> on the Main screen.

The Rhythm screen appears.



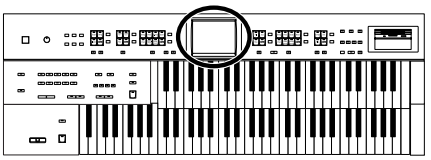
2. Touch < > (Utility) on the Rhythm screen.

The Utility screen appears.



3. Touch <Edit User>.

The Edit User screen appears.



4. **Touch <▲><▼> in the screen to select a rhythm.**

5. **Touch <Up> or <Down> to move the rhythm.**

Button	Meaning	Description
Rename	Modify the name	The Rename screen appears. You can touch the screen and rename the selected rhythm (p. 75).
Up	Change the order (upward)	The selected rhythm will be moved earlier in the order.
Down	Change the order (downward)	The selected rhythm will be moved later in the order.
Delete	Delete the Rhythm	The selected rhythm will be deleted (p. 77).

6. **Touch <Exit>.**

Changing the Names of Rhythms Stored in User Memory

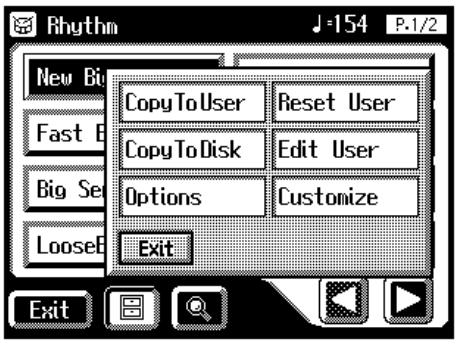
You can rename rhythms stored in User memory (p. 52).

1. Touch <Rhythm> on the Main screen.

The Rhythm screen appears.

2. Touch <> (Utility) on the Rhythm screen.

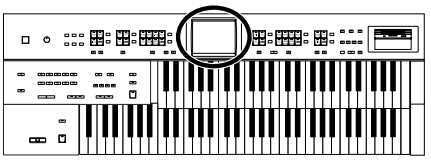
The Utility screen appears.



3. Touch <Edit User>.

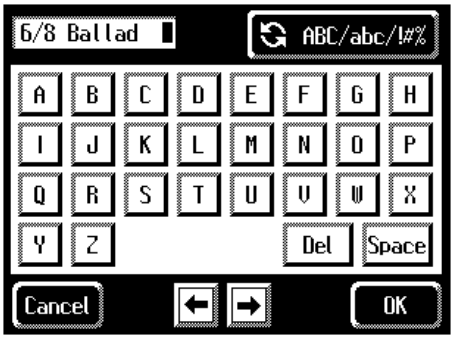
The Edit User screen appears.

4. Touch <><> to select the rhythm whose name you want to change.



5. **Touch <Rename>.**

The Rename screen appears.



6. **Touch < ABC/abc/!#% > to change among uppercase/ lowercase/symbols.**

Each touch of the character switch button takes you to the next available choice, like this: uppercase → lowercase → symbols → uppercase ....

7. **Touch the screen to specify the desired character.**

The following characters can be selected.

Uppercase	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Lowercase	a b c d e f g h i j k l m n o p q r s t u v w x y z
Symbols	! " # % & ' ( ) * + , - . / : = ? ^ _ 0 1 2 3 4 5 6 7 8 9
Del	Delete a character.
Space	Insert a space.
← →	Move the cursor (the symbol that indicates the location at which characters will be input) to left or right.

To cancel the operation, touch <Cancel>.

8. **When you're done making the settings, touch <OK>.**

The Rhythm has now been named. The Edit User screen reappears.

9. **Touch <Exit>.**

Deleting Rhythms Stored in User Memory

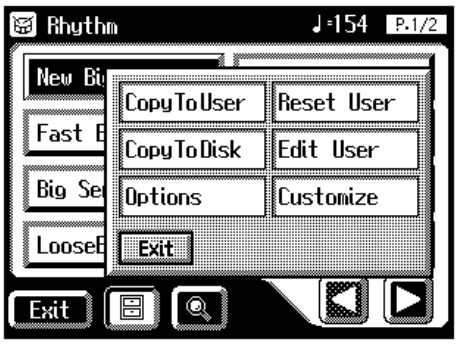
You can delete rhythms stored in User memory (p. 52).

1. Touch <Rhythm> on the Main screen.

The Rhythm screen appears.

2. Touch <> (Utility) on the Rhythm screen.

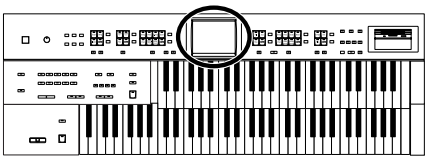
The Utility screen appears.



3. Touch <Edit User>.

The Edit User screen appears.

4. In the screen, touch <><> to select the rhythm that you wish to delete.



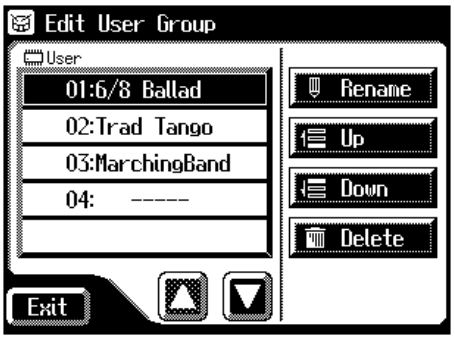
5. **Touch <Delete>.**

The following display appears.

To cancel operation, touch <Cancel>.

6. **If you are sure that you wish to delete the rhythm, touch <OK>.**

When a rhythm is deleted, the deleted rhythm name will change to "-----."



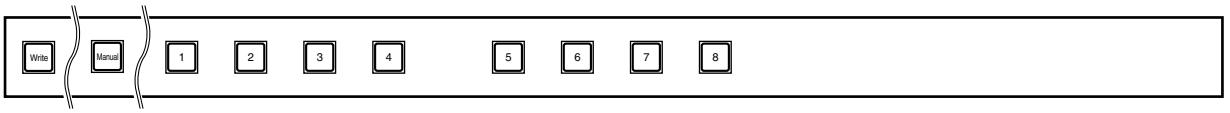
Chapter 3 Using the Registration Buttons

The AT-45 allows you to store sound settings and panel settings in the Registration buttons. The AT-45 has a total of eight registration buttons, and one set of panel settings can be registered to each button, for a total of eight types of panel settings. Each set of panel settings that has been stored in a Registration button is called a "Registration."

This provides a convenient way to change large numbers of panel settings during a performance, or to recall a complex panel setting.

MEMO

Settings that have been stored to Registration buttons [1]–[8] are remembered even if the power is turned off. If you wish to restore the settings stored in the Registration buttons to their factory settings, use the "Factory Reset" operation (p. 19).



About the Registration Buttons

In addition to assigning voices and rhythms to the Registration buttons, you can also store the following settings:

- Panel button settings (for example, settings for the Level [▲] [▼] buttons and Solo [To Lower] button)
- Controller settings (functions assigned to foot switches, pitch bend range, etc.)
- Other types of settings (reverb type, tempo settings, degree of initial touch, etc.)

If you would like to know all of the settings that can be recorded to the Registration buttons, refer to "Settings That Are Stored After the Power Is Turned Off" (p. 214).

Furthermore, you can group the settings assigned to the Registration [1]–[8] buttons as a single set, and then register and save up to a maximum of 99 sets onto a single floppy disk (p. 88).

In addition to the settings recorded to the Registration buttons, the following data is also saved when Registration sets are saved to floppy disks.

- Registration Name →p. 84
- Registration Shift →p. 106
- Arranger Update →p. 82
- Trans. Update (Transpose Update) →p. 174
- Exp. Curve (Expression Pedal Curve) →p. 108

MEMO

Recorded performance data and rhythms from User memory are not stored in Registration sets.
When a rhythm saved in User memory is assigned to a Registration set, that rhythm is copied beforehand to the User memory.

Procedure for Creating Registration Sets

You can change voice and other panel settings by pressing the Registration buttons during performance of songs.

Prepare the Registrations

A convenient way to make the sequence of Registration buttons to be pressed easy to understand is to store the panel settings starting from the Registration [1] button, continuing with subsequent buttons in accordance with the progression of the song.

Save the Registrations to the floppy disk

If you want to use more than eight Registrations in a song, save the settings for Registration buttons [1] through [8] to a floppy disk as a set, then continue to store further panel settings again, starting from Registration button [1]. Save all of the Registration sets you have set to the floppy disk.

Arrange the Registrations in the sequence they are to be used

Save the Registration sets to the floppy disk in the order they are to be used in the song.
You can use the Disk Edit function to alter the sequence and names of rhythms contained on the floppy disk (p. 84, p. 98) as well as delete such rhythms (p. 96).

Using Registration Sets

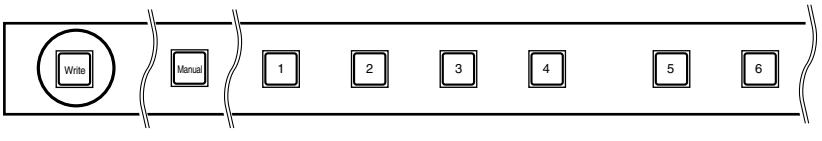
Call up the Registration sets saved on the floppy disk to the AT-45

Insert the floppy disk containing the saved Registration sets into the disk drive, and load the Registration sets into the AT-45 (p. 91).

Switch the Registration sets as you perform

Press the Registration buttons to switch Registrations as you play the song. You can assign the "Right + Load Next" to the foot switch and use it to call up subsequent Registration sets (p. 106). When the Load Next function is assigned to the foot switch, Registration sets are called up in the order they are saved on the floppy disk.

Storing Registrations



1. Make all the panel settings that you wish to store.

2. While holding down the [Write] button, press one of the Registration buttons [1]–[8].

The panel settings will be stored in the selected Registration button.

MEMO

For details on the settings that are stored in a Registration, refer to "Settings That Are Stored In the Registration Buttons" (p. 214).

Recalling a Registration

Settings that have been registered to Registration buttons [1]–[8] can be recalled in two ways: "INSTANT" and "DELAYED."

At the factory this is set to "DELAYED."

■ How to Recall a Registration (DELAYED)

Recalling voices and other panel settings

1. Press and immediately release one of the Registration buttons [1]–[8].

Recalling settings for Rhythm and Automatic Accompaniment in addition to the panel settings

1. Press and hold a Registration button [1]–[8] for several seconds.

The indicator of the rhythm select button will blink, and the panel settings and settings related to rhythm performance and automatic accompaniment will be recalled.

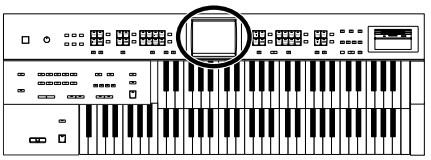
■ How to Recall a Registration (INSTANT)

Recalling panel settings of a voice, or when recalling settings for rhythm performance and Automatic Accompaniment in addition to panel settings

1. Press and immediately release one of the Registration buttons from [1] through [8].

MEMO

When changing the way Registrations are called up, refer to "Changing the Timing of Recalling Registrations" (p. 82).

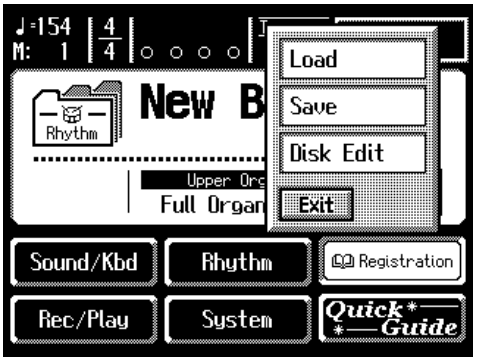


■ Changing the Timing of Recalling Registrations

Settings for Rhythm play and Automatic Accompaniment are recalled when you continue holding a Registration button [1]–[8] for several seconds, but you can change this so that the settings are recalled the instant you press the button.

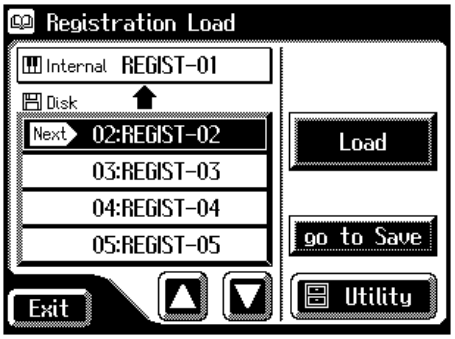
1. Touch <Registration> on the Main screen.

The sub-window appears.



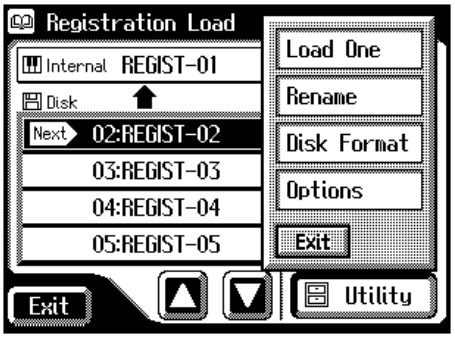
2. Touch <Load>.

The Registration Load screen appears.



3. Touch <Utility>.

The Utility screen appears.



MEMO

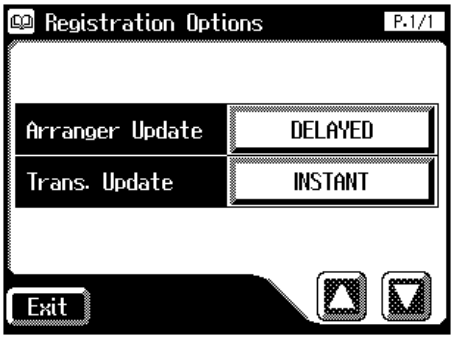
You can also open the Registration Load screen by pressing the [Registration] button on the panel.

MEMO

When you touch <go to Save>, the instrument jumps to the Registration Save screen.

4. **Touch <Options>.**

The Registration Options screen appears.



5. **Touch the Arranger Update setting to switch between "DELAYED" and "INSTANT."**

Each time you touch the Arranger Update setting, it will alternate between "DELAYED" and "INSTANT."

Setting	Descriptions
DELAYED	When you press and hold a Registration button for several seconds, the settings for Rhythm and Automatic Accompaniment will be recalled in addition to the panel settings. If you press and immediately release a Registration button, only the settings that are not related to Rhythm or Automatic Accompaniment will be recalled.
INSTANT	Settings for Rhythm and Automatic Accompaniment will be recalled the instant that you press a Registration button [1]–[8].

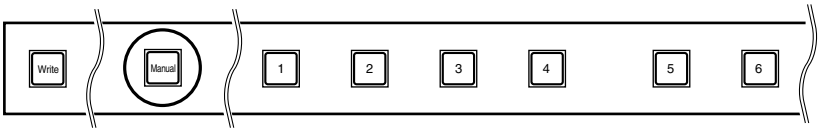
6. **Touch <Exit>.**

MEMO

You can change the timing of recalling the transpose setting when you press a Registration button.
For details refer to "Changing the Timing at Which Transposition Settings are Recalled" (p. 174).

Automatically Registering When You Switch Panel Settings

When the [Manual] button is ON (lit), all panel settings you make will be stored automatically in the [Manual] button as they are made, thus updating the Registration that had been previously saved.



NOTE

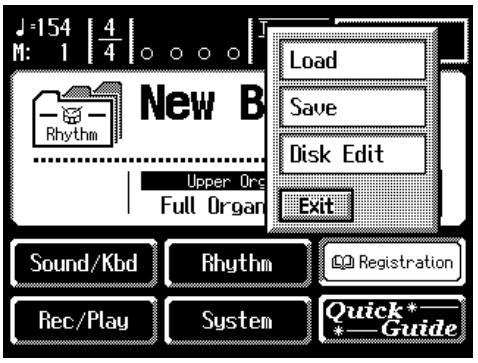
The settings stored in the [Manual] button will return to their default values when the power is turned off.

Assigning a Name to a Registration Set

When saving Registration sets, names like “Factory Reg.” will be assigned by default, but you can assign a name that will help you later to identify the contents of the Registration set.

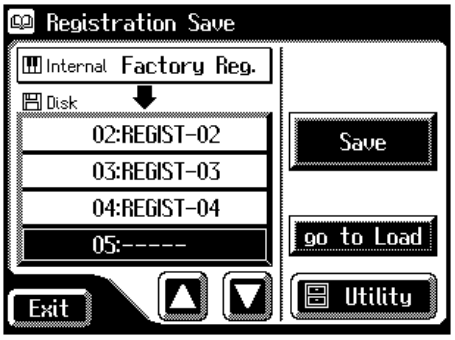
1. Touch <Registration> on the Main screen.

The sub-window appears.



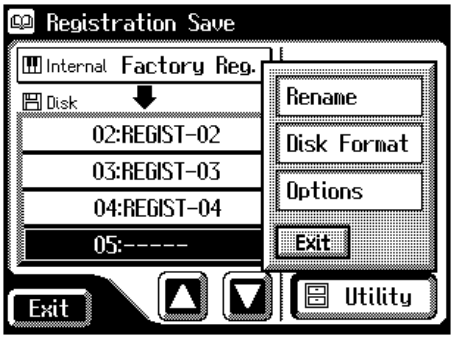
2. Touch <Save>.

The Registration Save screen appears.



3. Touch <Utility> to open the Utility screen.

The Utility screen appears.

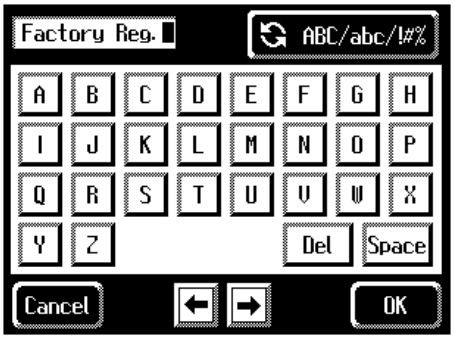


MEMO

When you touch <go to Load>, the instrument jumps to the Registration Load screen.

4. Touch <Rename>.

The Rename screen appears.



5. Touch < ABC/abc/!#% > to change among uppercase/lowercase/symbols.

Each touch of the character switch button takes you to the next available choice, like this: uppercase → lowercase → symbols → uppercase ....

6. Touch the screen to specify the desired character.

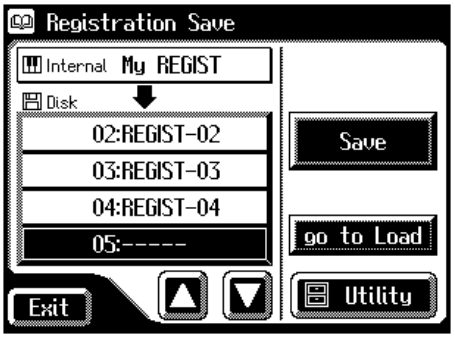
The following characters can be selected.

Uppercase	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Lowercase	a b c d e f g h i j k l m n o p q r s t u v w x y z
Symbols	! " # % & ' ( ) * + , - . / : = ? ^ _ 0 1 2 3 4 5 6 7 8 9
Del	Delete a character.
Space	Insert a space.
← →	Move the cursor (the symbol that indicates the location at which characters will be input) to left or right.

To cancel the operation, touch <Cancel>.

7. When you're done making the settings, touch <OK>.

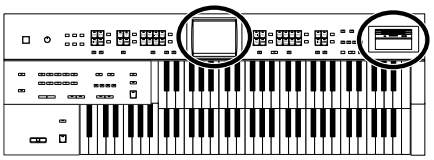
The Registration set in the AT-45's internal memory has now been named.



MEMO

The Rename screen can also be opened in the following ways.

Main screen
<Registration>→ <Load>→ Registration Load screen
<Utility>→ Utility screen
<Rename>



Formatting Disks

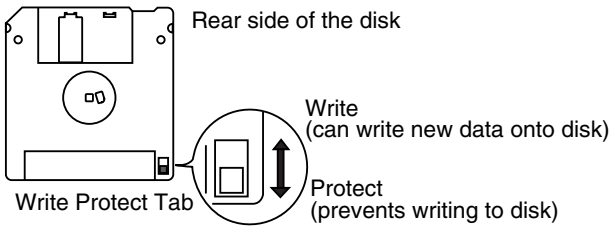
Before any floppy disk (new or used) can be used with the AT-45 it must first be formatted (prepared).

Formatting a floppy disk erases all information stored on the disk, and puts it in a format that is acceptable for the device in which it will be used. If a floppy disk is in a format that doesn't match the format of this unit, you won't be able to use that floppy disk.

NOTE

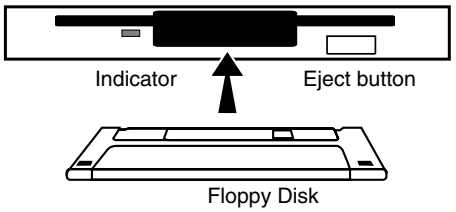
Formatting a floppy disk erases all data previously stored on the disk. If you're formatting a used floppy disk for reuse, be sure to check first to make sure the disk doesn't contain any data you don't want to lose.

1. Make sure that the write protect tab of the floppy disk is in the "Write" (permit) position.



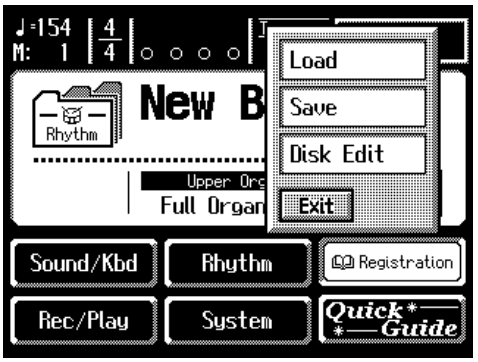
2. With the label of the floppy disk facing upward, insert it into the disk drive until it clicks into position.

The disk drive is located to the upper right of the AT-45's keyboard.



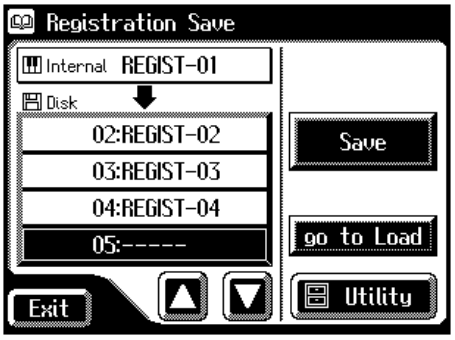
3. Touch <Registration> on the Main screen.

The sub-window appears.



4. **Touch <Save>.**

The Registration Save screen appears.



5. **Touch <Utility>.**

The Utility screen appears.

6. **Touch <Format Disk>.**

The Format Disk screen appears.

If you touch <Cancel>, you will return to the Registration Save screen without formatting.

7. **Touch <OK> to start formatting.**

While formatting is in progress, the following display appears.

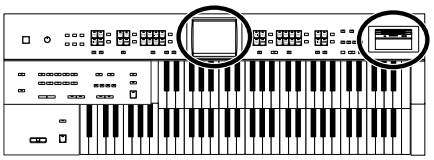
When the format is finished, the Registration Save screen returns.

MEMO

When you touch <go to Load>, the instrument jumps to the Registration Load screen.

NOTE

Never attempt to remove the floppy disk until formatting is complete.



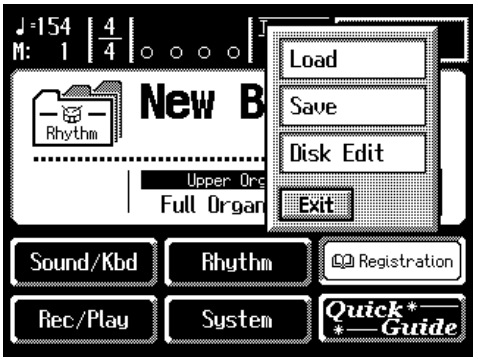
Saving Registration Sets to a Floppy Disk

With the settings of Registration buttons [1]–[8] considered as one set, a single floppy disk can store up to 99 sets of data. We recommend that complex panel settings or Registrations you wish to keep be saved on disk. If AT-45 Furthermore, when you save registrations created on the AT-45 to floppy disks, you can call up their settings on other Atelier Series instruments and use the registrations the same way.

1. Make sure that the disk drive contains a disk that was formatted (p. 86) by the AT-45.

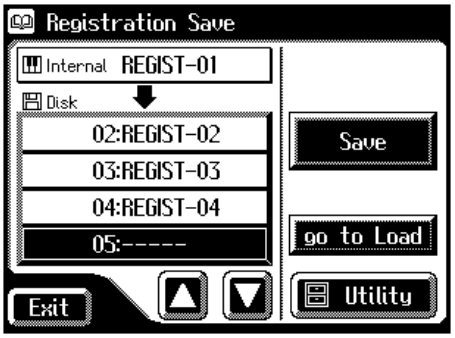
2. Touch <Registration> on the Main screen.

The sub-window appears.



3. Touch <Save>.

The Registration Save screen appears.



MEMO

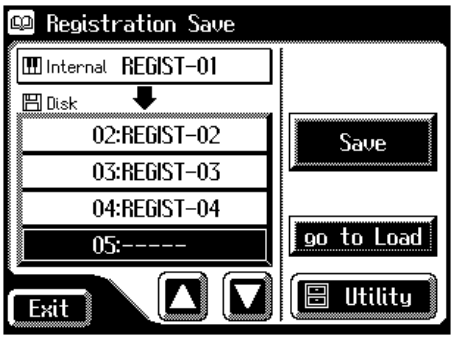
When you touch <go to Load>, the instrument jumps to the Registration Load screen.

MEMO

If you wish to assign a name before you save, refer to "Assigning a Name to a Registration Set" (p. 84)

4. Touch <▲><▼> in the screen to select the save-destination number.

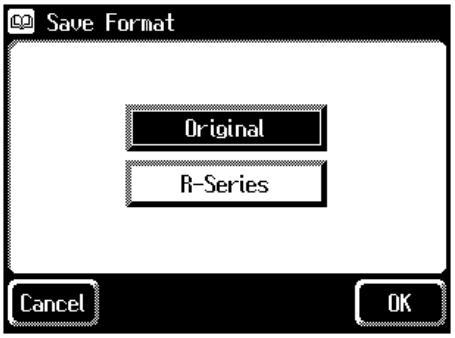
Numbers which have not been used in the saving operation will be displayed as "- - - - -."



To cancel the Save operation, touch the <Exit> button to close the Registration Save screen.

5. Touch <Save>.

The Save Format screen appears.



6. Touch <Original> or <R-Series>.

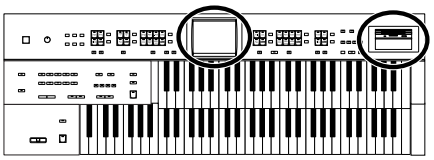
Settings	Description
Original	Save formats that can be used with the AT-45 When saved in this format, the data can also be used by AT-15 and AT-S Series devices.
R-Series	Save formats that can be used with AT-R Series devices

7. Touch <OK>.

Saving of the registration data will begin.

When saving ends, the "- - - - -" in the screen will change to the registration name that you saved.

If you have assigned a name, the Registration set will be saved to floppy disk with that name.



If the following screen appears

If you select a number at which a registration has already been saved and touch <Save>, the following screen appears.

If you wish to update the contents of the Registration data

1. **Touch <OK>.**

If you wish to save new data instead of updating the registration

1. **Touch <Cancel>.**

Rewriting of the Registration will be canceled.

2. **In the Registration Save screen, select the number that is displayed as "-----" (a number that currently does not contain registration data).**

3. **Save the Registration (p. 88).**

When saving is complete, the saved registration name will be displayed.

Loading Previously Saved Registration Sets Into the AT-45

Here's how to recall a previously saved Registration set from the floppy disk into the memory of the AT-45. Registrations can be selected in the following three ways.

Loading a Set of Registrations (Load) → p. 91

You can load a "set" (a collection of settings for Registration buttons [1]–[8]) from floppy disk.

Loading an Individual Registration (Load One) → p. 93

Recall the settings of one of the Registration [1]–[8] buttons.

Recalling the Order that the Registrations are Saved on the Floppy Disk (Load Next) → p. 106

When the Load Next function is assigned to the foot switch (p. 106), Registration sets are called up in the order they are saved on the floppy disk.

NOTE

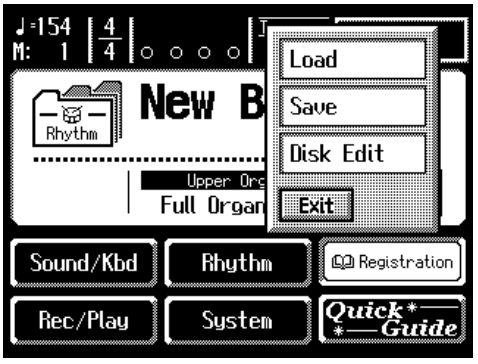
Be aware that when you load Registrations from a disk, the Registrations that were previously in internal memory will be lost. It is a good idea to save important Registrations to floppy disk (p. 88).

■ Loading a Set of Registrations

1. Insert the floppy disk containing the Registration into the disk drive.

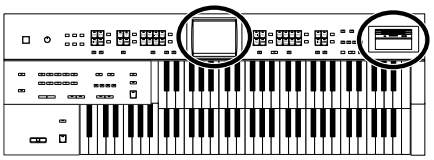
2. Touch <Registration> on the Main screen.

The sub-window appears.



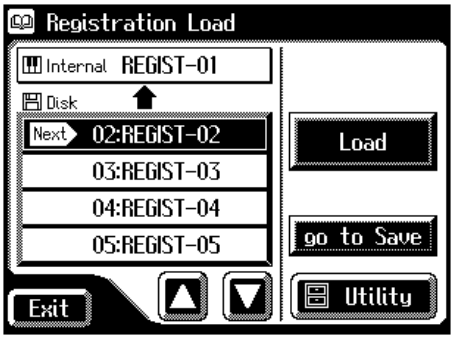
MEMO

You can also open the Registration Load screen by pressing the [Registration] button, instead of performing steps 2 and 3.



3. Touch <Load>.

The Registration Load screen appears.



4. In the screen, touch <▲><▼> to select the Registration that you wish to load into internal memory.

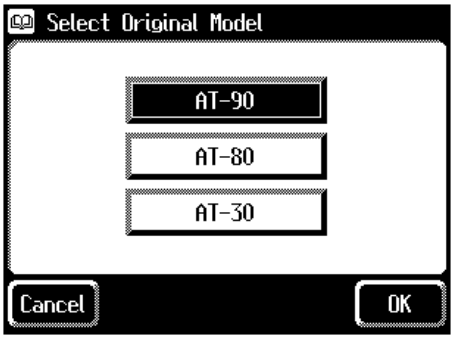
To cancel operation, touch <Exit>.

5. Touch <Load>.

The registration data will start being read.

When the Registration has been loaded, the Registration Load screen will reappear.

While registrations saved on the AT-90/AT-80/AT-30 are being loaded into this instrument, the following screen appears.



When you use the Registrations saved on the AT-90/AT-80/AT-30, refer to "Using Registrations Created on an Earlier Model" (p. 99)

MEMO

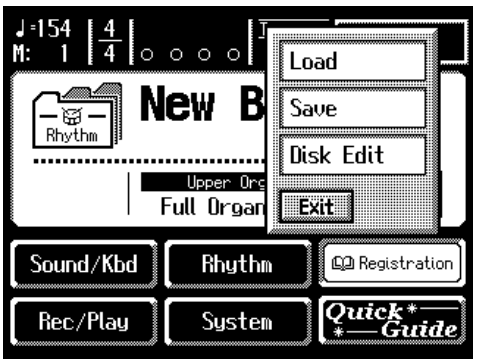
When you touch <go to Save>, the instrument jumps to the Registration Save screen.

■ Loading an Individual Registration

1. Insert the floppy disk containing the Registration into the disk drive.

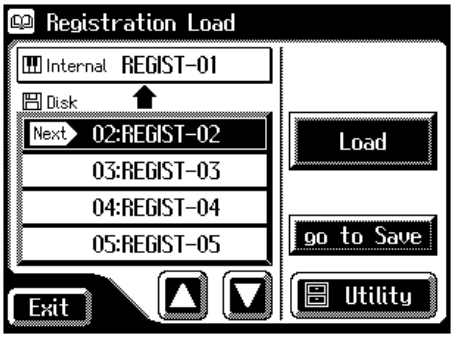
2. Touch <Registration> on the Main screen.

The sub-window appears.



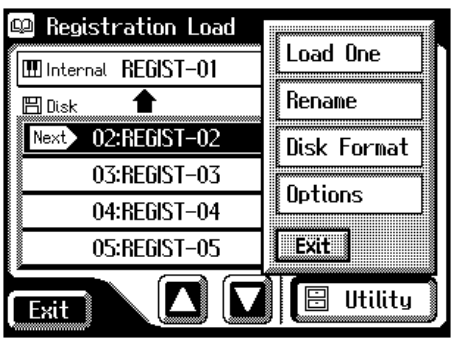
3. Touch <Load>.

The Registration Load screen appears.



4. In the screen, touch <▲><▼> to select the registration that you wish to load into internal memory.

5. Touch <Utility> to open the Utility screen.

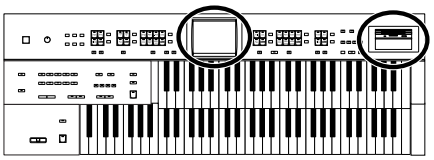


MEMO

You can also open the Registration Load screen by pressing the [Registration] button, instead of performing steps 2 and 3.

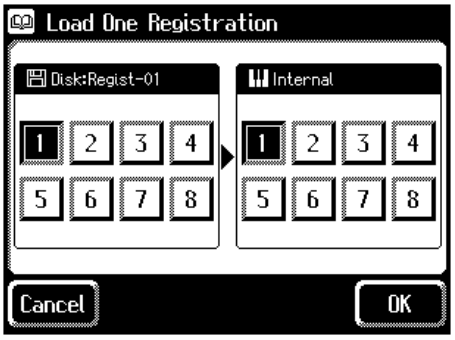
MEMO

When you touch <go to Save>, the instrument jumps to the Registration Save screen.

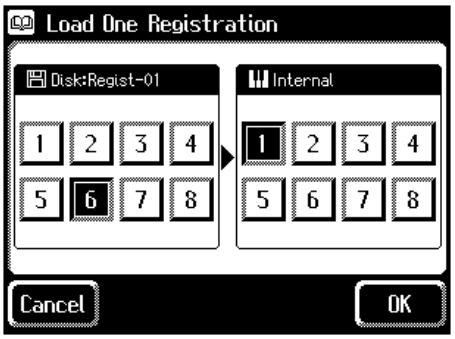


6. **Touch <Load One>.**

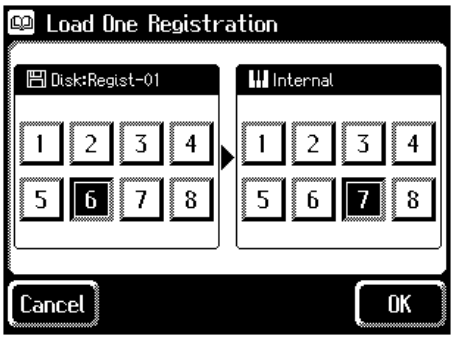
The Load One Registration screen appears.



7. **In the screen, touch Disk <1>–<8> to select the number of the registration button that you wish to load from disk into internal memory.**



8. **In the screen, touch Internal <1>–<8> to select the number of the storage-destination button.**

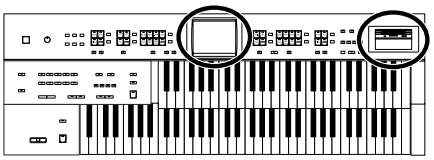


To cancel this operation, touch <Cancel>.

9. When you're done making the settings, touch <OK>.

The following display appears.

When the Registration has been loaded, the basic screen will reappear.



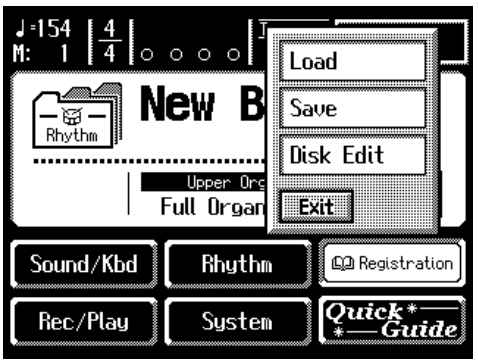
Deleting a Set of Registrations from a Floppy Disk

Here's how to delete a Registration set that was saved to a floppy disk.

1. Insert the floppy disk containing the Registration into the disk drive.

2. Touch <Registration> on the Main screen.

The sub-window appears.



3. Touch <Disk Edit>.

The Disk Edit screen appears.

Button	Mean	Description
Rename	Modify the name	The Rename screen appears. You can touch the screen and rename the selected registration (p. 84).
Up	Change the order (upward)	The selected registration will be moved earlier in the order (p. 98).
Down	Change the order (downward)	The selected registration will be moved later in the order (p. 98).
Delete	Delete the Registration	The selected registration will be deleted.

4. **In the screen, touch <▲><▼> to select the registration that you wish to delete.**

5. **Touch <Delete>.**

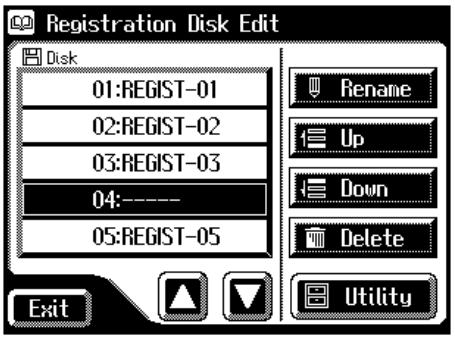
The following display appears.

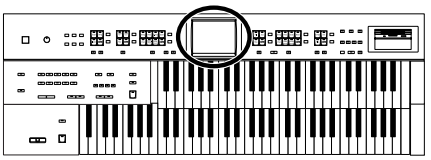
To cancel operation, touch <Cancel>.

6. **If you are sure that you wish to delete the registration, touch <OK>.**

When the Registration has been deleted, the Disk Edit screen will reappear.

When a registration is deleted, the deleted registration name will change to "- - - - -."





Changing the Order of Registration on Floppy Disk

After saving registrations on floppy disk, you can change the order or name of the registrations (p. 84), or delete a registration (p. 96).

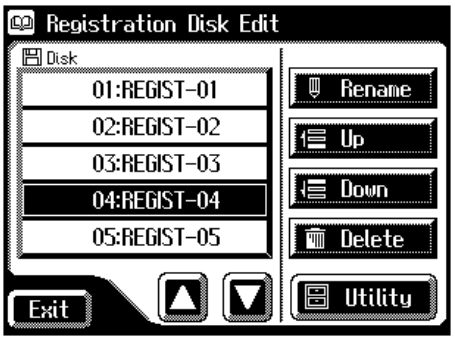
1. Insert the floppy disk containing the Registration into the disk drive.

2. Touch <Registration> on the Main screen.

The sub-window appears.

3. Touch <Disk Edit>.

The Disk Edit screen appears.

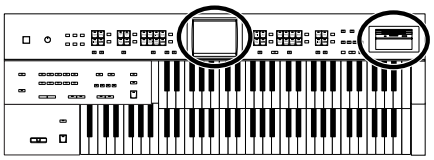


4. Touch <▲><▼> in the screen to select a registration.

5. Touch <Up> or <Down> to move the registration.

Button	Mean	Description
Rename	Modify the name	The Rename screen appears. You can touch the screen and rename the selected registration (p. 84).
Up	Change the order (upward)	The selected registration will be moved earlier in the order.
Down	Change the order (downward)	The selected registration will be moved later in the order.
Delete	Delete the Registration	The selected registration will be deleted (p. 96).

6. Touch <Exit>.



Using Registrations Created on an Earlier Model

Registrations that were created on the AT-90/80/30 or ATELIER-R series (AT-90R/80R/60R/30R/20R) can be used on the AT-45.

When using a set of registrations that was created on the AT-90/80/60 models, your registrations will be converted to work in the AT-45 models and loaded into internal memory. When loading these registrations the music style that was originally used can also be loaded into the [Disk/User] button to complete the accurate reproduction of the original registration.

MEMO

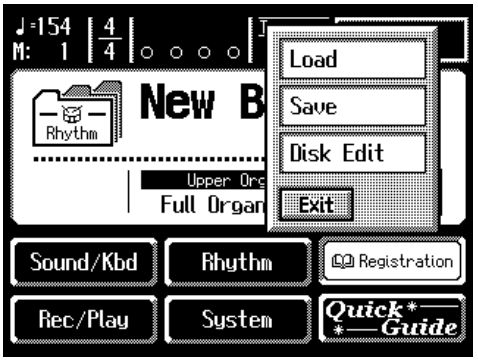
This operation is not necessary when recalling a registration that was created on a model in the AT-R series.

Recalling a registration that was created on the "AT-90/80/30"

1. Insert the floppy disk that contains Registrations created on an earlier model of the ATELIER series.

2. Touch <Registration> on the Main screen.

The sub-window appears.

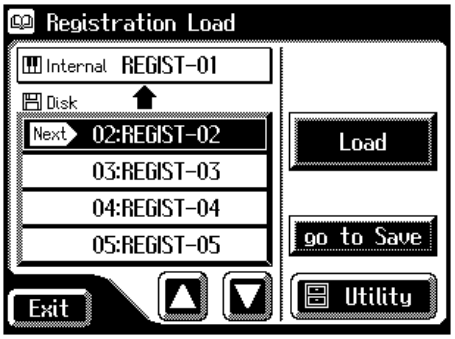


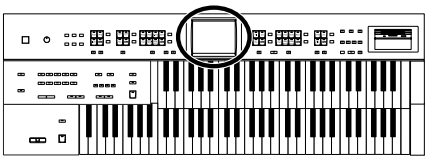
MEMO

You can also open the Registration Load screen by pressing the [Registration] button, without performing steps 2 and 3.

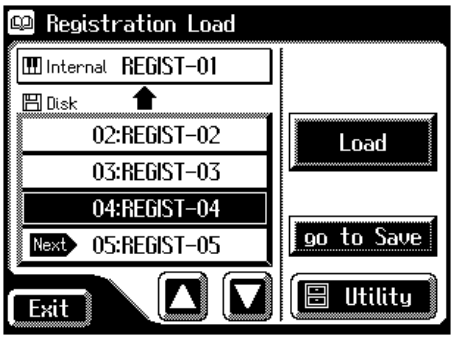
3. Touch <Load>.

The Registration Load screen appears.





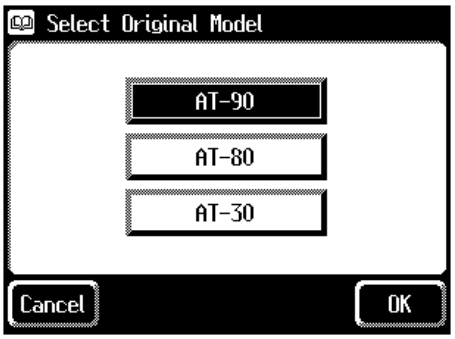
4. Touch <▲><▼> to select the registration that you wish to load into internal memory.



To cancel operation, touch <Exit>.

5. Touch <Load>.

The following screen appears.



To cancel operation, touch <Cancel>.

6. Touch the screen to select the model on which the Registration was created.

7. Touch <OK> to confirm the model on which the Registration was created.

If the Rhythm used by the Registration is found in the internal memory of the AT-45, the Registration will be loaded into internal memory.

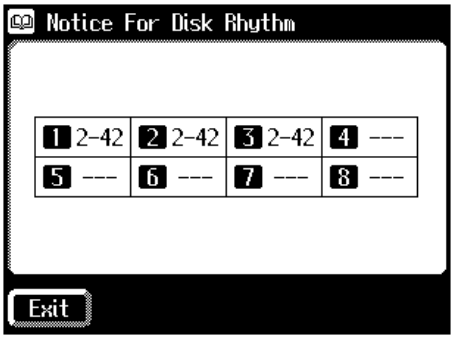
When loading is complete, the Registration Load screen will reappear.

NOTE

If the Rhythm of the [Disk/User] button has been rewritten, there may be cases in which the Registration cannot be loaded correctly.

If internal memory does not contain a rhythm specified by the registration

The number of the included music style disk that contains that rhythm will be displayed.



8. Make a note of the number of the music style disk, and touch <Exit>.

A similar rhythm that does exist in internal memory will be substituted for the rhythm that does not exist, and the registration will be loaded.

Loading a AT-90/80/30 rhythm into the [Disk/User] button

If you wish to use a Rhythm used by an earlier model of the ATELIER series with a Registration that you loaded, load the Rhythm from the Music Style disk into the [Disk/User] button.

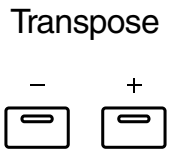
9. Remove the Registrations floppy disk from the disk drive, and insert the Music Style disk.

10. Load the Rhythm whose number you noted in step 8 into the [Disk/User] button (p. 68).

Transposing to a Different Key (Key Transpose)

You can transpose the key of a performance without having to shift the position of your fingers on the keyboard. This feature is called "Key Transpose."

For example: you may play in the familiar C major scale while your music will sound in any key of your choice.



1. Set the value for the transposition with the Transpose [-] and [+] buttons.

Each time you press a Transpose [-] [+] button, the pitch will be transposed by a semitone.

Acceptable values range from A ♭ to G (in semitone steps).

The specified value will be displayed in the Main screen.

MEMO

The transposition setting is stored in the Registration. For details on the settings that are stored in the Registration, refer to **"Settings That Are Stored After the Power Is Turned Off"** (p. 214).

State of the Transpose [-] [+] buttons

If transposed (non-C)	One of the Transpose [-] [+] button indicators is lit.
If not transposed (C)	The Transpose [-] [+] button indicators are extinguished.

MEMO

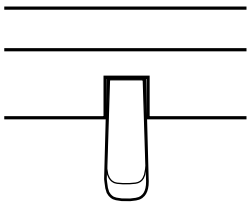
You can change the timing at which the transposition settings saved in a Registration will be recalled. For details refer to **"Changing the Timing at Which Transposition Settings are Recalled"** (p. 174).

2. By pressing the Transpose [-] [+] buttons simultaneously, you can restore the default setting C.

Adding Decay to the Sound (Damper Pedal)

When you depress the Damper (Sustain) pedal, a decay effect will be added to the voices.

While you continue depressing the damper pedal, notes will be sustained even if you release the keys.



By default the decay effect will be applied to the voices played on the Lower keyboard.

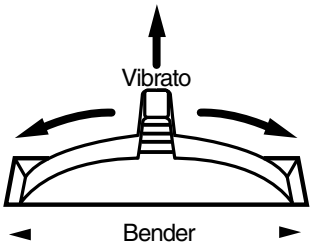
MEMO
You can modify the setting so that decay is applied to notes played on the Upper keyboard (p. 171).

NOTE
Decay cannot be added to the Solo voices.

MEMO
You can play the Pedal Bass voice in the Lower keyboard (the [To Lower] button is on). In this case, a decay will not be applied to the pedal bass voice.

Pitch Bend and Vibrato Effects

When you move the Pitch Bend/Vibrato lever to the left or right, you can obtain a smooth change in the pitch of the notes being played (Pitch Bend effect). Move the lever to the right to raise the pitch, and to the left to lower it. Also, when you push the lever away from you, a vibrato effect can be obtained.



By default (immediately after the power is turned on) the Pitch Bend effect is added to the voices of all the sections being played on the Upper keyboard.

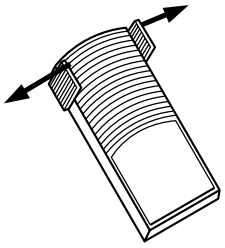
MEMO
You can also adjust the range of the pitch which is shifted by the Pitch Bend lever. For details, refer to **"Changing the Pitch Bend Range"** (p. 172).

NOTE
Please note that only the appropriate voices will allow vibrato to be added (p. 196).

MEMO
You can change the settings so that both the Pitch Bend and Vibrato effects are applied to the Lower keyboard voice or the voices on the Pedalboard. Please refer to **"Selecting the Keyboard to Which the Pitch Bend/Vibrato Lever will Apply"** (p. 171).

Using the Foot Switches

On either side of the expression pedal are two Foot Switches. Different functions are assigned to each of these two foot switches.



With the factory settings, the following functions are assigned to the left and right Foot Switches.

Right Foot Switch	**Switch the Rotary effect between Fast/Slow.** If Rotary is turned on, the Rotary effect will switch between "Fast" and "Slow" each time you press the Foot Switch.
Left Foot Switch	**Glide (an effect by which the pitch is lowered by a semitone while the foot switch is pressed, and is returned to what is originally was when you release your foot).** While you are pressing the Foot Switch, the pitch will be temporarily lowered. When you release the Foot Switch, the pitch will return to normal gradually.

You can store functions to be assigned to the foot switch to individual Registration buttons (p. 80).

MEMO

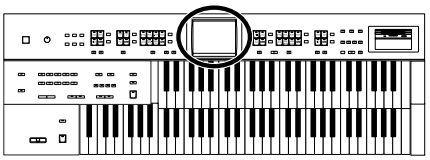
You can also change the functions assigned to the left and right Foot Switches. Please refer to **"Changing the Function of the Foot Switch"** (p. 105).

NOTE

If "Regist Shift" is turned "RIGHT," "LEFT," or "RIGHT +Load Next," the foot switch will function only to switch registrations (p. 106).

MEMO

The Glide effect will only be applied to the keyboard section that has been specified as being the destination for the Pitch bend/Vibrato lever. Please refer to **"Selecting the Keyboard to Which the Pitch Bend/Vibrato Lever will Apply"** (p. 171).



■ Changing the Function of the Foot Switch

You can select any of the following functions and assign them to either Foot Switch on the right or left side of the Expression Pedal.

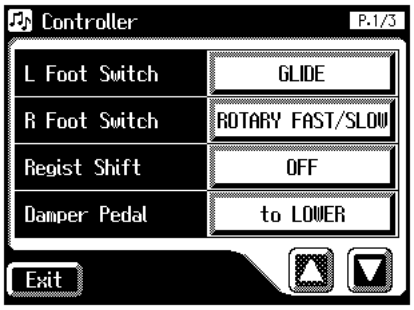
1. Touch <Sound/Kbd> on the Main screen.

The Sound/Keyboard screen appears.

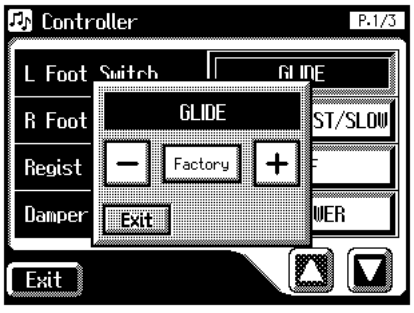
2. Touch <Controller>.

The Controller screen appears.

3. Touch <▲><▼> to display the L Foot Switch or R Foot Switch.



4. Touch <L Foot Switch> or <R Foot Switch> setting.



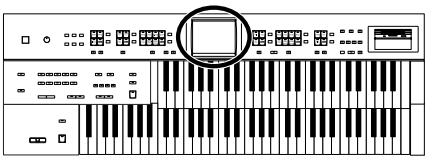
5. Touch <−><+> to change the setting.

6. Touch <Exit>.

Available functions	Description
ROTARY FAST/SLOW	Switch the Rotary speed between "FAST" and "SLOW."
GLIDE	While the Foot Switch is pressed, the pitch will temporarily be lowered, and will gradually return to normal when you release the Foot Switch. When the power is turned on, Glide effect is added to the voice of all the sections being played on Upper keyboard.
LEADING BASS	The Leading Bass function (p. 62) will operate only while you continue pressing the Foot Switch.
RHYTHM START/STP	Start/Stop the Rhythm.
COMP PLAY/STOP	The same function as the Composer [Play/Stop] button. Each time you press the Foot Switch, the performance data will play back or stop.
INTRO/ENDING	Play an Intro or Ending.
FILL IN TO VAR	After inserting a Fill-In, playback will switch to the variation pattern.
FILL IN TO ORIG	After inserting a Fill-In, playback will switch to the original pattern.
ORCHESTRATOR	Switch the Style Orchestrator button.If the Style Orchestrator [Basic] button or [Advanced2] button is selected, the [Basic] and [Advanced2] buttons will be switched.If the [Advanced1] button or [Full] button is selected, the [Advanced1] button and [Full] button will be switched.
BREAK	Stop the rhythm at the end of that measure.
DAMPER OF UPPER	Notes played on the Upper keyboard will be sustained only while you continue pressing the Foot Switch.
DAMPER OF LOWER	Notes played on the Lower keyboard will be sustained only while you continue pressing the Foot Switch.

NOTE

If the "Regist Shift (Registration Shift)" setting (p. 106) is "RIGHT," "LEFT," or "RIGHT + Load next," the Foot Switch will be dedicated to switching through the Registrations, and the "R Foot Switch" or "L Foot Switch" setting will be ignored (p. 106).



■ Using the Foot Switch to Switch Registrations

You can use the Foot Switch as a dedicated switch for selecting Registrations in order.

NOTE

Regist Shift settings are stored to each registration set. When using the Load Next function to switch registrations saved to a floppy disk, set the Regist Shift setting for all of the saved registrations to "RIGHT + Load Next."

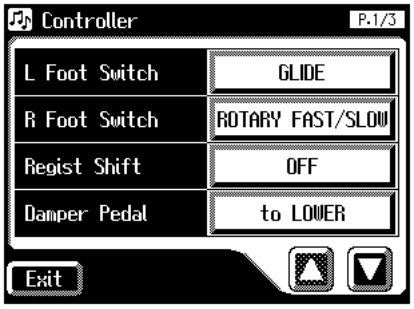
1. Touch <Sound/Kbd> on the Main screen.

The Sound/Keyboard screen appears.

2. Touch <Controller>.

The Controller screen appears.

3. Touch <▲><▼> to display the Regist Shift.



4. Touch the Regist Shift setting.

5. Touch <−><+> to change the setting.

6. Touch <Exit>.

MEMO

This setting remains stored in memory even while the power is turned off.

Setting	Descriptions
OFF	You can use a function assigned to the foot switch.
RIGHT	The right foot switch is dedicated to switching registrations. The function assigned to the right foot switch cannot be used.
LEFT	The left foot switch is dedicated to switching registrations. The function assigned to the left foot switch cannot be used.
RIGHT + Load Next	The right foot switch is dedicated to switching registrations. The function assigned to the right foot switch cannot be used. Selecting the Registration [8] button and pressing the right foot switch activates the Load Next function, calling up the next registration saved to the disk. The Registration Load window appears in the display. When you then press the right foot switch again, the Registration Set is confirmed, and the Registration [1] button is selected. Example: 1→2→3...→8→Load Next→ (Next Registration) 1

What is "Load Next"?

You can use the Load Next function to call up Registrations in the order saved to the floppy disk.

When you will be performing live, you can save registration sets to floppy disk in the order in which you will be performing. Then while you perform, you can recall the next registration set easily and smoothly.

Checking the next registration set

1. Display the Main screen (p. 22).

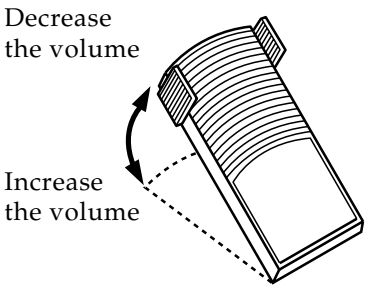
2. Touch the <Rhythm> icon several times to switch to <Regist.>.

The Main screen display will switch to the registration.

"Next" will indicate the name of the next registration set.

Adjusting the Overall Volume Using an Expression Pedal

You can use the expression pedal to adjust the overall volume. When you depress the Expression Pedal, the volume increases. The volume decreases as you tilt the pedal back.



Using the expression pedal enables you to give your performances even richer musical expressiveness.

The expression pedal features the following special characteristics:

- Completely releasing the expression pedal does not lower the volume to zero. If you do want to turn down the volume completely, turn the [Master Volume] knob completely to the left (counterclockwise).
- Even as you release your foot from the expression pedal and lower the volume, the lower-range portion will linger on. This provides a natural-sounding resonance.
- When an Active Expression voice is selected, the expression pedal can be used to produce changes in the voice (p. 43).

MEMO

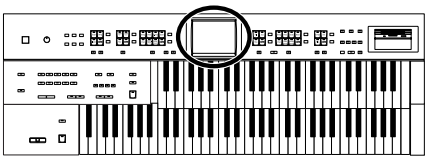
You can specify how the Expression Pedal will affect the sound when it is pressed (p. 108).

MEMO

You can also specify whether the Expression Pedal will or will not control the volume during the recording of your performance (p. 170).

MEMO

You can specify whether the Expression Pedal will or will not control the volume during the playback of recorded performance (p. 171).



■ Adjusting the Depth of the Expression Pedal

You can set the amount of effect applied when you step on the expression pedal.

1. Touch <Sound/Kbd> on the Main screen.

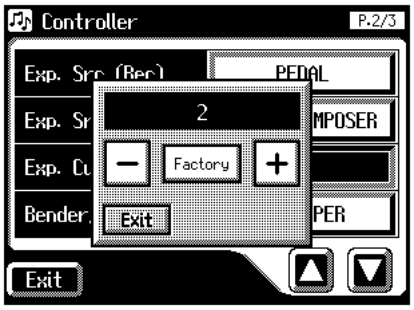
The Sound/Keyboard screen appears.

2. Touch <Controller>.

The Controller screen appears.

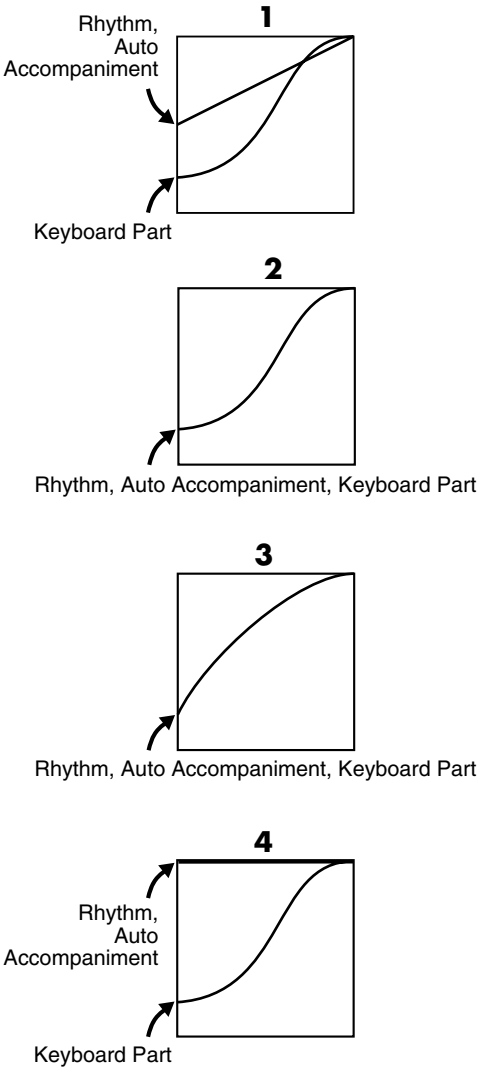
3. Touch <▲><▼> to display the Exp. Curve (Expression Curve).

4. Touch <Exp. Curve> setting.



5. Touch <−><+> to change the setting.

Setting	Descriptions
1	The position of the expression pedal does not really affect the rhythm performances and Automatic Accompaniment. This setting is convenient when you do not want to have the rhythm or Automatic Accompaniment volume change much.
2	The expression pedal is applied to the rhythms and Automatic Accompaniment just as it is to the keyboard performance. The volume is easily adjusted according to the angle of the expression pedal, making this setting perfect for use in songs with big changes in dynamics.
3	The expression pedal is applied to the rhythms and Automatic Accompaniment just as it is to the keyboard performance. The expression affect is applied more gently than with Setting 2, so this setting is appropriate for quieter songs with less intense dynamic changes.
4	The expression pedal does not affect the rhythms and Automatic Accompaniment at all. This setting is suitable for ensemble performances and other performances featuring multiple instruments.



6. Touch <Exit>.

MEMO

This setting remains stored in memory even while power is turned off.

Chapter 5 Applying Various Effects to the Sound

The AT-45 allows you to apply various effects to the sounds you play from the keyboard.

Adding Harmony to a Melody (Harmony Intelligence)

Harmony appropriate for the chord you play in the lower keyboard can be added to the highest note played in the upper keyboard. This function is called "Harmony Intelligence."

When you press the [Harmony Intelligence] buttons, the voice most suitable for the selected harmony intelligence will be selected automatically.

1. Press the [Harmony Intelligence] button, getting its indicator to light up.

Each time you press the button, the indicator will alternate between ON (lit) and OFF.

The Harmony Intelligence screen appears for several seconds.

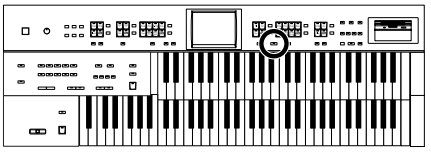
■ Changing the Type of Harmony Intelligence

There are 8 different Harmony types.

When you press the [Harmony Intelligence] button to turn it on (lit), a voice most suitable for the selected harmony intelligence will be selected automatically. The manner in which notes will sound also depends on the Harmony type.

1. Press the [Harmony Intelligence] button, getting its indicator to light up.

The Harmony Intelligence screen appears for several seconds.



2. Touch the screen to select the desired harmony intelligence.

The [Harmony Intelligence] button's indicator will blink.

3. Press the [Harmony Intelligence] button once again.

The [Harmony Intelligence] button indicator will light, indicating that the selected harmony intelligence has been confirmed.

The way in which the keys you press are sounded by each type of harmony intelligence is described below.

Type	Solo Voice	Upper Voice	Number of notes of the harmony
BIG BAND	Trumpet	Flugel Horn	4
STRINGS	Strings 1	Strings 1	4
TRADITIONAL	Currently Selected Tone		3
HARP	—	Harp	2
COMBO	Clarinet	Trombone	2
JAZZ SCAT	Jazz Scat	Jazz Scat	3
BROADWAY	Celesta	Theater Or.1	3
OCTAVE 1	Currently Selected Tone		2

MEMO

You can also confirm the Harmony Intelligence settings by touching <Exit> on the Harmony Intelligence screen.
You can also play the upper manual to confirm the type of the Harmony Intelligence.

MEMO

Harp-type harmony intelligence does not sound the keys you play. Use your left hand to play a chord in the lower keyboard and use your right hand to play a glissando in the upper keyboard, and a beautiful harp glissando will be produced.

NOTE

The number of notes of the harmony will depend on the Harmony Intelligence type.

Adding Modulation to the Sound (Rotary Effect)

Rotary is an effect which simulates the sound of rotating speakers. There is a choice of two settings: Fast and Slow.

1. Select the voice to which you wish to apply the Rotary effect.

2. Press the Rotary Sound [On/Off] button (confirm that its indicator is lit).

The Rotary effect will be applied to the voice.

3. Press the Rotary Sound [Fast/Slow] button to switch between Rotary Fast (LED lit) and Rotary Slow (LED turned off).

Rotary [Fast/Slow] button	Effect
LED lit (Fast)	The effect obtained is equivalent to speakers being rapidly rotated.
LED turned off (Slow)	Effect simulating the slow rotation of speakers.

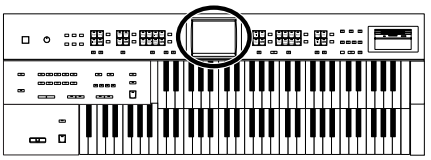
When you switch the rotary effect from "Fast" to "Slow," the modulation will slow down gradually, and when you switch from "Slow" to "Fast" the modulation will speed up gradually.

NOTE

For more on the tones to which the Rotary effect can be applied, refer to "Voice List" (p. 196).

MEMO

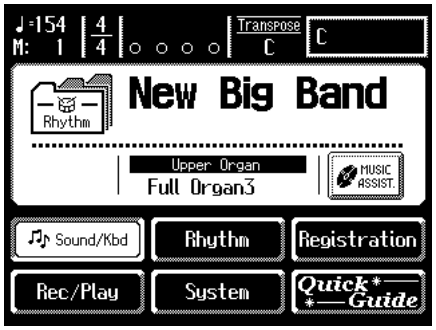
You can assign the Rotary Sound [Fast/Slow] button function to the foot switches located on each side of the Expression Pedal (p. 105).



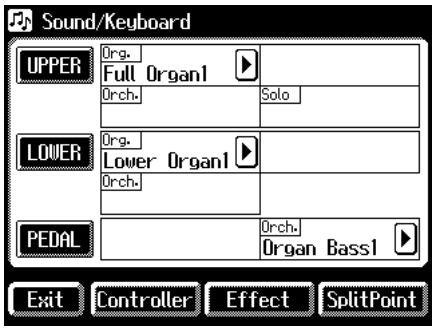
■ Rotary Speed

You can make fine adjustments to the speaker rotation speed of the rotary effect (p. 111).

1. Touch <Sound/Kbd> on the Main screen.

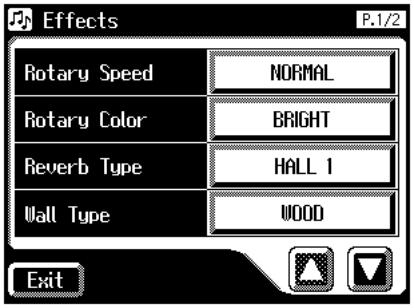


The Sound/Keyboard screen appears.



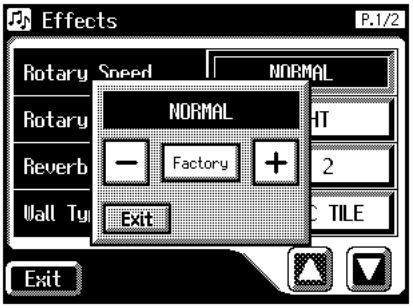
2. Touch <Effect>.

The Effect screen appears.



3. Touch <▲><▼> to display the Rotary Speed.

4. Touch the value setting buttons for Rotary Speed to adjust the setting.



5. Touch <−><+> to edit the value.

Settings **SLOW, NORMAL, FAST**

6. Touch <Exit>.

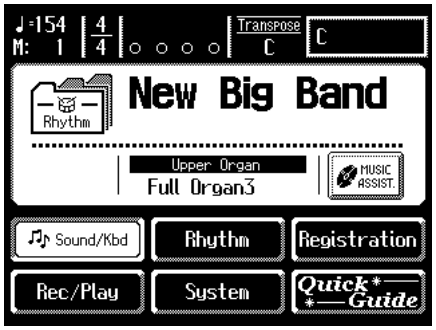
MEMO

These settings remain stored in memory even while the power is off.

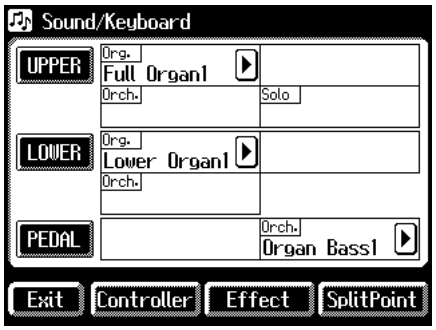
■ Rotary Color

This setting allows you to choose the brightness of the Rotary sound obtained when using the Rotary effect (p. 111).

1. Touch <Sound/Kbd> on the Main screen.

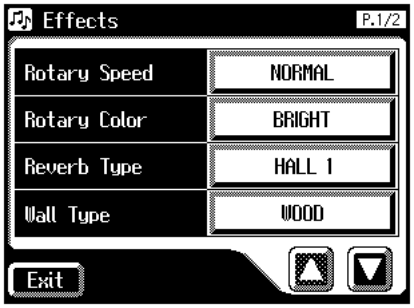


The Sound/Keyboard screen appears.



2. Touch <Effect>.

The Effect screen appears.



3. Touch <▲><▼> to display the Rotary Color.

4. Touch the value setting buttons for Rotary Color to adjust the setting.

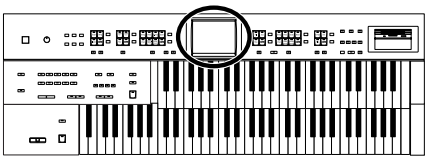
Each time you touch the Rotary Color setting, it will switch between "BRIGHT" and "MELLOW."

Settings **BRIGHT, MELLOW**

5. Touch <Exit>.

MEMO

These settings remain stored in memory even while the power is off.

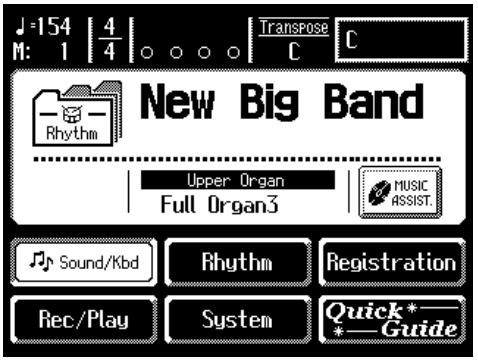


Chorus Effect

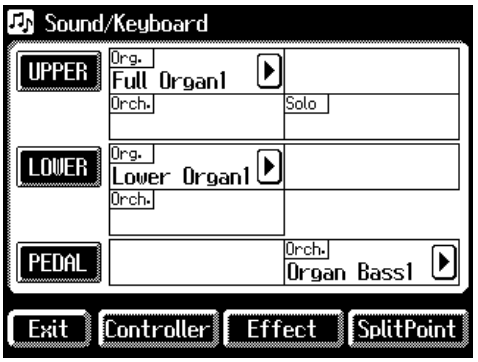
Chorus is an effect that adds expansiveness to a sound, making one instrument sound like several.
You can apply a chorus effect for the "Upper Orchestral" and "Lower Orchestral" voices.

MEMO
For some of the voices, Chorus may already be turned ON.

1. Touch <Sound/Kbd> on the Main screen.



The Sound/Keyboard screen appears.

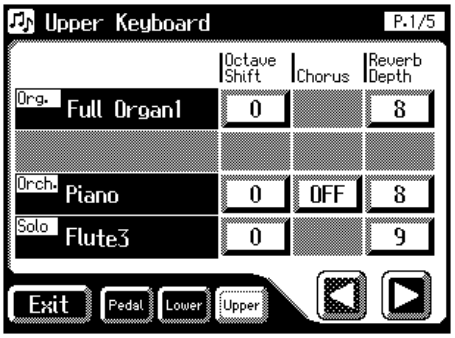


2. Touch either <UPPER> or <LOWER>.

Menu	Part to apply Chorus effect
UPPER	To apply chorus to the Upper part
LOWER	To apply chorus to the Lower part

3. **Touch the Chorus "ON/OFF" display to change the setting.**

Each time you touch the Chorus setting, it will alternate ON/OFF.

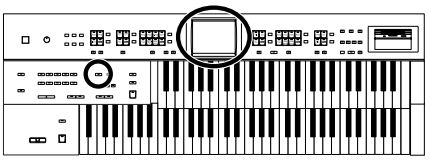


Indication	Description
ON	The Chorus effect will be applied to the voice.
OFF	The Chorus effect will not be applied to the voice.

4. **Touch <Exit>.**

NOTE

Some voices do not allow the Chorus effect to be applied. For details refer to "Voice List" (p. 196).



Sustain Effect

Sustain allows you to add a sustain effect or decay to each voice after the keys are released.

The Sustain effect can be added to the Upper (except the Solo part), Lower, and Pedal voices.

NOTE
The Sustain effect will not be applied to the Solo part voice.

When Applying Sustain to the Pedal Part

MEMO
The length of Sustain can be modified independently for each keyboard (p. 117).

1. Press the Sustain [Pedal] button to make the indicator light.

The Sustain effect is applied to the voices of the Pedal Bass part.

When Applying Sustain to the Upper Part and Lower Part

1. Touch <Sound/Kbd> on the Main screen.

The Sound/Keyboard screen appears.

2. Touch either <UPPER> or <LOWER>.

Menu	Part to apply Chorus effect
UPPER	To apply sustain to the Upper part
LOWER	To apply sustain to the Lower part

MEMO
You can also change the sustain setting of Pedalboard on the Pedalboard screen.

3. Touch <◀><▶> to display the Sustain.

4. Touch the Sustain setting to switch between "ON" and "OFF."

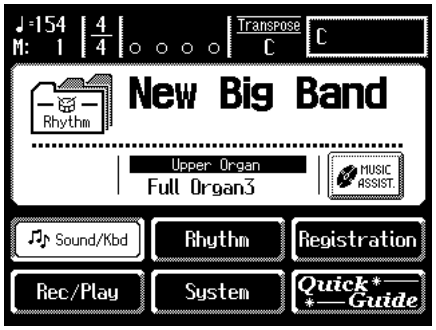
Each time you touch the Sustain setting, it will alternate ON/OFF.

5. Touch <Exit>.

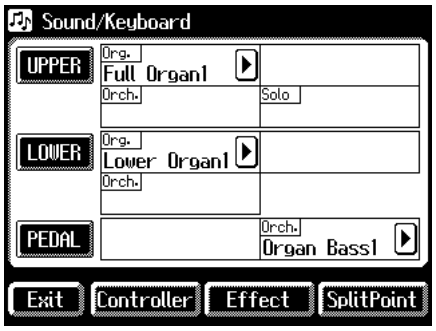
■ Changing the Sustain Length

The sustain length can be set independently (SHORT, MIDDLE (Medium) or LONG) for the Upper and Lower keyboards and Pedalboard. You can make a separate setting for each keyboard.

1. Touch <Sound/Kbd> on the Main screen.



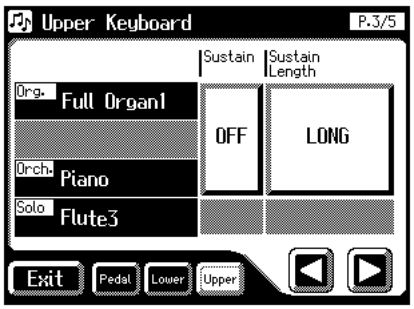
The Sound/Keyboard screen appears.



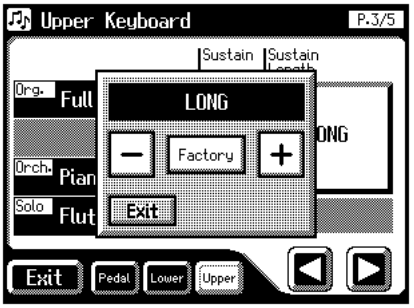
2. Touch either <UPPER>, <LOWER>, or <PEDAL>.

Menu	Part whose sustain length you wish to change
UPPER	To change the length of the Upper part.
LOWER	To change the length of the Lower part.
PEDAL	To change the length of the Pedal part.

3. Touch <◀><▶> to display the Sustain Length.



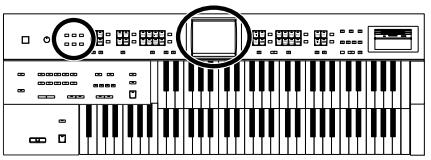
4. Touch the Sustain "SHORT/MIDDLE/LONG" display.



5. Touch <−><+> to change the value.

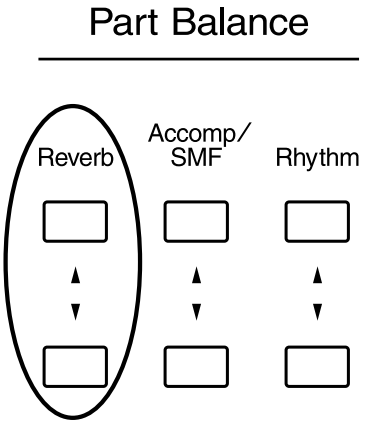
Settings **SHORT, MIDDLE, LONG**

6. Touch <Exit>.



Reverb Effect

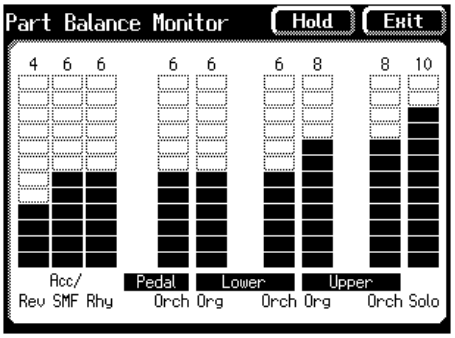
Reverb is an effect that adds a sense of spaciousness to the sound, creating the illusion of playing in a large or small concert hall, a large or small room, a small club, etc.



1. Press the Reverb [▲] or [▼] buttons to adjust the overall Reverb amount.

When you press the up button [▲], additional Reverb is applied. Pressing the down button [▼] decreases the Reverb level.

When you press the Reverb [▲][▼] buttons, the Part Balance Monitor screen appears. In the Part Balance Monitor screen you can check the reverb depth.



MEMO

The Part Balance Monitor screen is displayed for several seconds and then closes automatically.
If you touch <Hold>, the screen continues to be displayed until you touch <Hold> again.

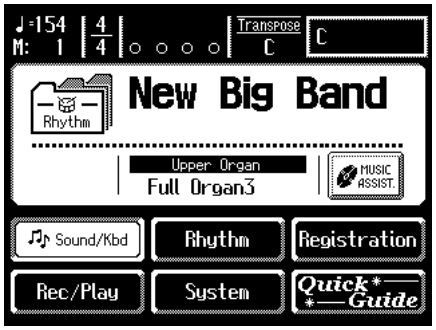
MEMO

You can change the type of reverb, the reverb depth for each part, and the wall type. For details refer to **Changing the Reverb Type** (p. 119), **Changing the Depth of the Reverb** (p. 121), and **Changing the Wall Type** (p. 120).

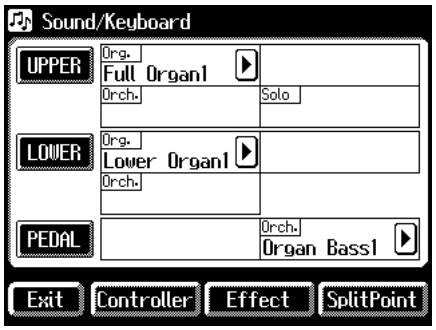
■ Changing the Reverb Type

By changing the reverberations of the notes, you can enjoy the atmosphere of performance in a wide variety of different locations. You can select from the following 11 types of Reverb.

1. Touch <Sound/Kbd> on the Main screen.

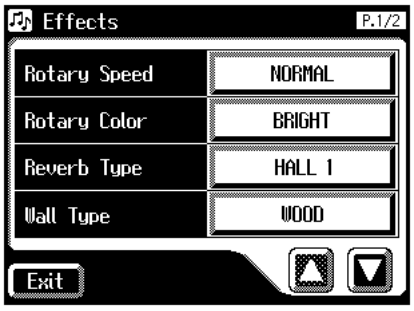


The Sound/Keyboard screen appears.



2. Touch <Effect>.

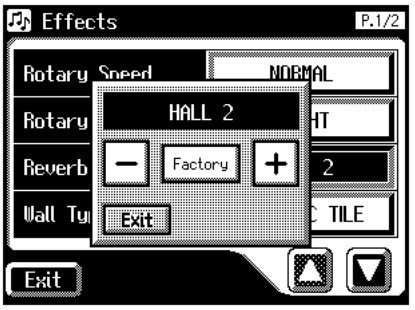
The Effect screen appears.



3. Touch <▲><▼> to display the Reverb Type.

4. Touch the value setting buttons for Reverb Type to adjust the setting.

The following screen appears.



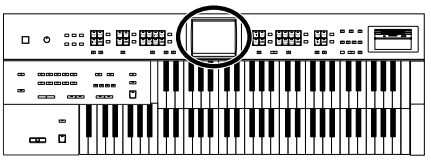
5. Touch <−><+> to change the setting.

Display	Description
ROOM 1	Simulates the reverb of a conference room
ROOM 2	Simulates the reverb of a performance lounge
ROOM 3	Simulates the reverb of a large, open room
HALL 1	Simulates the reverb of a large concert hall
HALL 2	Simulates the reverb of a small concert hall
SMALL CHURCH	The reverberation of a small church
LARGE CHURCH	The reverberation of a large church
CATHEDRAL	The reverberation of a cathedral
PLATE	Applies a bright, metallic reverb
DELAY	An echo-like sound repeated several times
PAN DELAY	Similarly to the above but where the sound is panned between the left and right speakers

NOTE

It is not possible to modify the delay time (delay interval) when "DELAY" or "PAN DELAY" is selected.

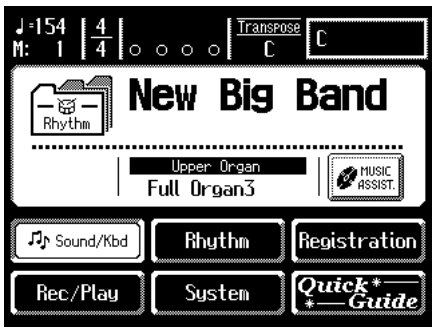
6. Touch <Exit>.



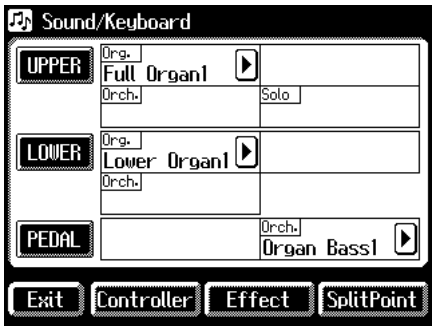
■ Changing the Wall Type

By changing the type of reverb (p. 119) you can experience the feeling of performing in various different locations, and by changing the Wall Type (wall material) you can make further adjustments to the way in which reverberation occurs.

1. Touch <Sound/Kbd> on the Main screen.

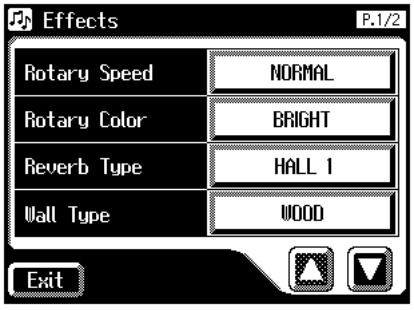


The Sound/Keyboard screen appears.



2. Touch <Effect>.

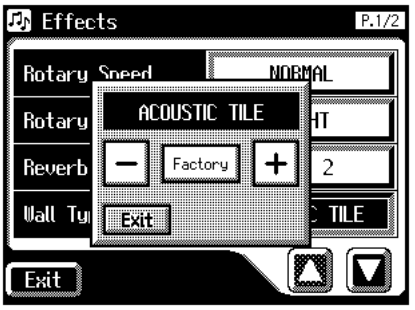
The Effect screen appears.



3. Touch <▲><▼> to display the Wall Type.

4. Touch the value setting buttons for Wall Type to adjust the setting.

The following screen appears.



5. Touch <−><+> to change the setting.

Display	Description
DRAPERY	Pleated curtain
CARPET	Carpet
ACOUSTIC TILE	Acoustical tile, sound-absorptive tile
WOOD	Wood
BRICK	Brick
PLASTER	Plaster
CONCRETE BLOCK	Concrete block
MARBLE	Marble

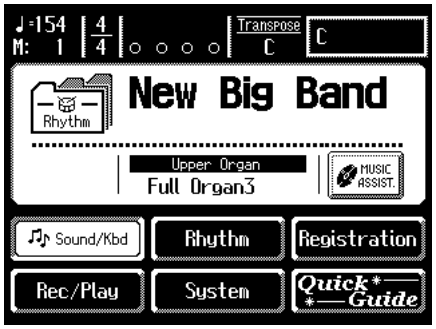
6. Touch <Exit>.

■ Changing the Depth of the Reverb

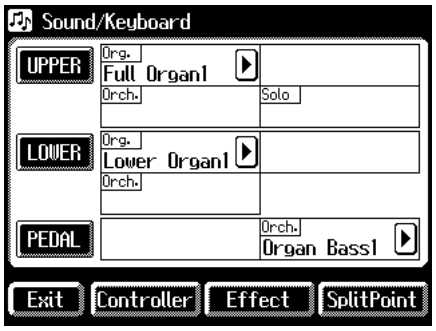
The depth of the Reverb can be set (0–10).

To adjust the reverb depth for Upper/Lower/Pedal/Solo

1. Touch <Sound/Kbd> on the Main screen.



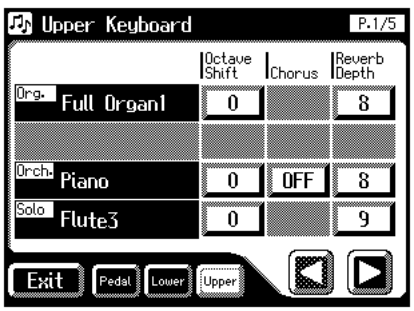
The Sound/Keyboard screen appears.



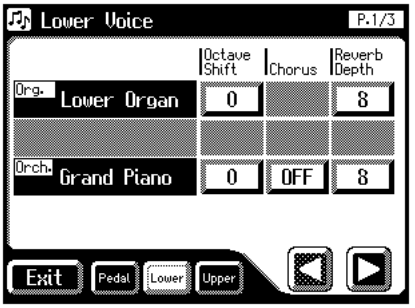
2. Touch <UPPER>, <LOWER>, or <PEDAL>.

The Upper Keyboard screen, Lower Keyboard screen, or Pedalboard screen will be displayed.

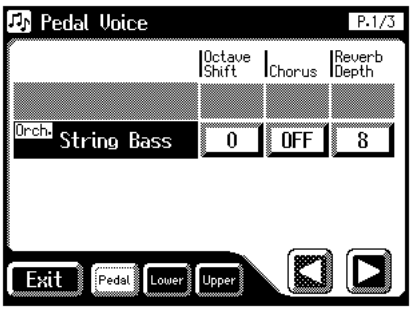
Upper



Lower



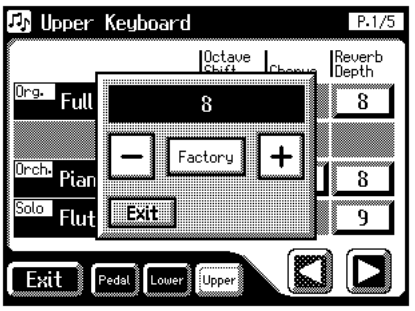
Pedal



3. Touch <◀><▶> to display the Reverb Depth

4. Touch the part whose reverb depth you wish to adjust.

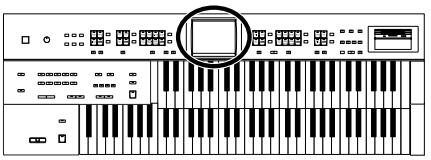
The following screen appears.



5. Touch <−><+> to adjust the setting.

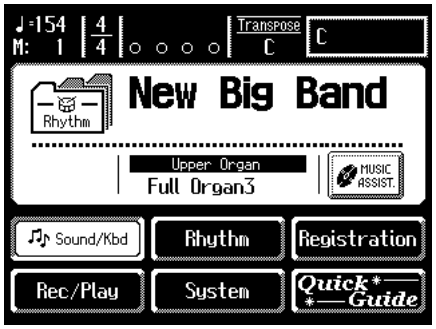
Settings **0–10**

6. Touch <Exit>.

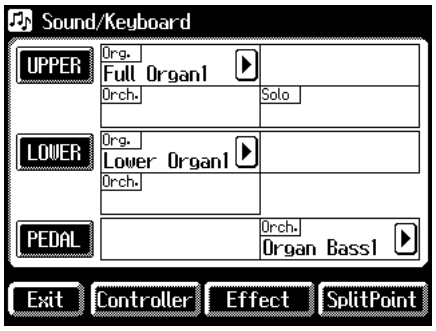


To adjust the reverb depth for something other than Upper/Lower/Pedal/Solo

1. Touch <Sound/Kbd> on the Main screen.

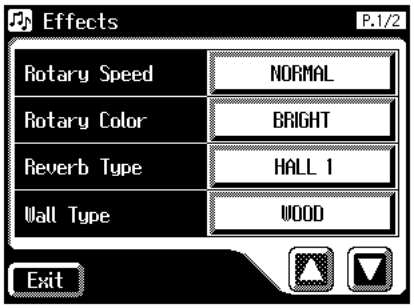


The Sound/Keyboard screen appears.

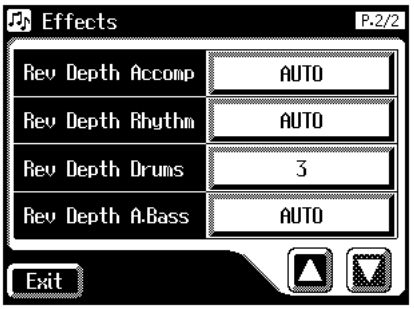


2. Touch <Effect>.

The Effect screen appears.

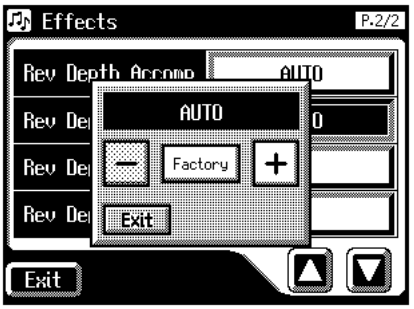


3. Touch <▲><▼> to display the Rev Depth (Reverb Depth).



4. Touch the part whose reverb depth you wish to adjust.

The following screen appears.



5. Touch <−><+> to adjust the setting.

Settings **0–10, AUTO (Accomp, Rhythm, A.Bass)**

For the three Parts of the Accomp, Rhythm and Accompaniment Bass, you have the option of selecting the "AUTO" setting. Parts for which "AUTO" is selected will be set to the Reverb Depth that is most suitable for the Rhythm currently selected.

6. Touch <Exit>.

Chapter 6 Using the Lower Keyboard Effectively

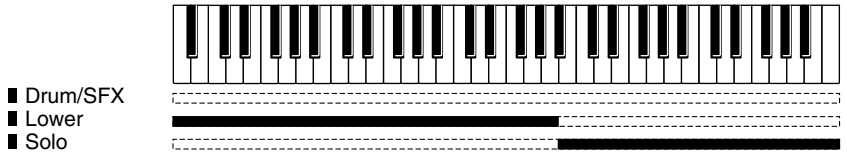
Making Effective Use of the Lower Keyboard

Since the lower keyboard of the AT-45 provides a generous 64 notes, you can use it to play piano pieces with ease. In addition, you can divide the keyboard into two sections and play solo voices.

For example, the following applications are possible.

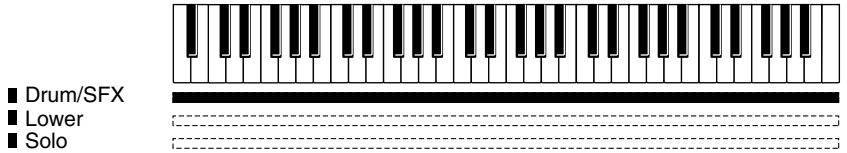
Using the Lower Keyboard to Play the Solo Voice

- Press the Solo [To Lower] button in the Upper Solo section to Play the Solo voice to the Lower keyboard (p. 124).



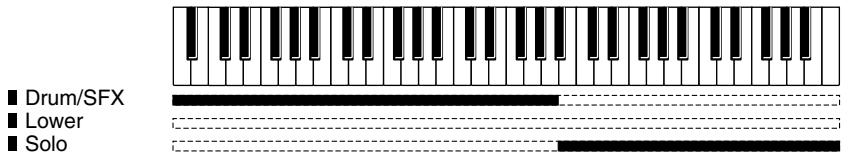
Playing Drum Sounds from the Entire Lower Keyboard

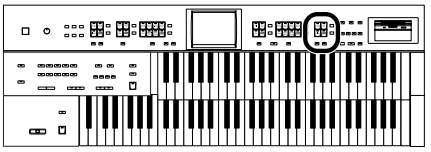
- Press the [Drums/SFX] button (p. 48).



Using the Lower Keyboard to Play Drum Sounds and Solo Voice

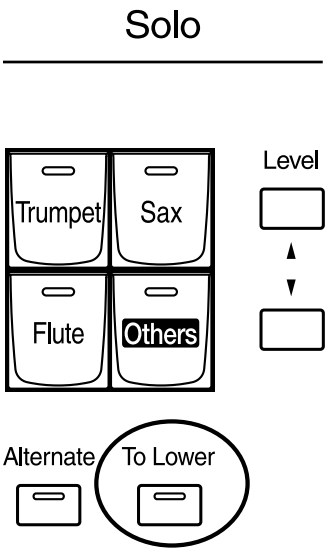
- Press the [Drums/SFX] button (p. 48).
- Press the Solo [To Lower] button in the Upper Solo section to Play the Solo voice to the Lower keyboard (p. 124).





Playing the Solo Voice on the Lower Keyboard (Solo [To Lower] Button)

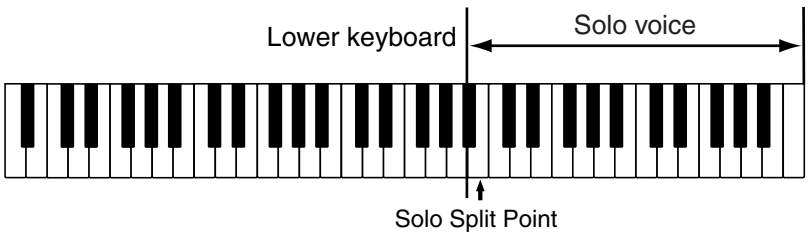
Normally, the solo voice will sound on the upper keyboard.
By using the Solo [To Lower] button, you can play the solo voice in the right-hand side of the lower keyboard that includes the B4 key. The state in which the keyboard is divided in this way is called "split," and the location at which the keyboard is divided to play the solo voice in the lower keyboard is called the "Solo Split Point."



1. Select a Solo voice (p. 38).

2. Press the Solo [To Lower] button (indicator lights).

When you play the Lower keyboard, the Solo voice will sound in the range to the right of the Solo Split Point.



3. To turn off the Solo split, press the Solo [To Lower] button (indicator turns off).

The Solo voice will no longer sound in the Lower keyboard; the Solo voice will now be played in the Upper keyboard.

MEMO
The solo split point is included in the Solo voice zone.

NOTE
If the Solo [To Lower] is ON, the Solo voice will not be heard from the upper keyboard.

MEMO
You can adjust the Solo Split Point (p. 126).

MEMO
You can change how the Solo voice will sound (p. 125).

MEMO
You can layer the Solo voice with the Lower voice so that they will sound together (p. 125).

■ Changing How the Solo Voice Responds

When the Solo voice is assigned to the Upper keyboard or the Lower keyboard, you can specify how the Solo voice will respond when more than one key is pressed.

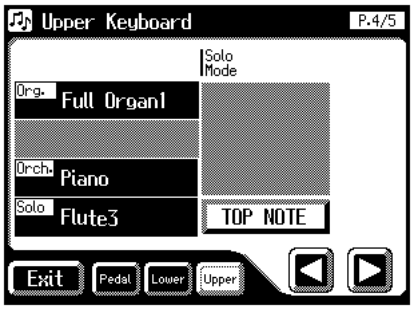
1. Touch <Sound/Kbd> on the Main screen.

The Sound/Keyboard screen appears.

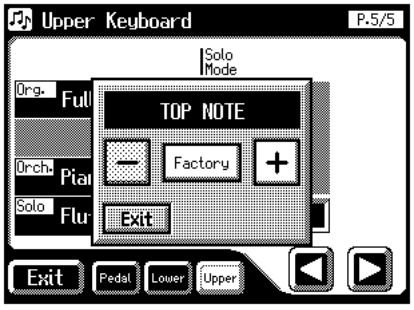
2. Touch <UPPER>.

The Upper Keyboard screen appears.

3. Touch <◀><▶> to display the Solo Mode.



4. Touch the Solo Mode setting (the TOP NOTE, LAST NOTE, or POLYPHONIC indication).



5. Touch <−><+> to change the setting.

Setting	Descriptions
TOP NOTE	The Solo voice will sound the highest note that is played for the Solo part.
LAST NOTE	The Solo voice will sound the note that was most recently played for the Solo part.
POLYPHONIC	The Solo voice will sound all notes that are played for the Solo part.

6. Touch <Exit>.

■ Layering the Solo Voice and Lower Voice

When the Solo voice is being played by the Lower keyboard (i.e., when the Solo [To Lower] button is ON), you can specify whether the Lower voice and the Solo voice will sound together (layered), or will sound separately (split).

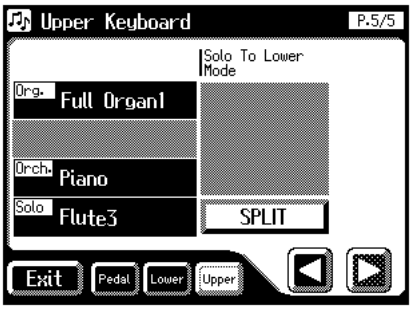
1. Touch <Sound/Kbd> on the Main screen.

The Sound/Keyboard screen appears.

2. Touch <UPPER>.

The Upper Keyboard screen appears.

3. Touch <◀><▶> to display the Solo To Lower Mode.

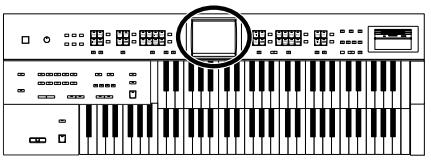


4. Touch the Solo To Lower Mode setting to switch between "SPLIT" and "LAYER."

Each time you touch the Solo To Lower Mode setting, it will alternate between "SPLIT" and "LAYER."

Setting	Descriptions
SPLIT	The parts will sound separately.
LAYER	The Lower voice and Solo voice will sound together.

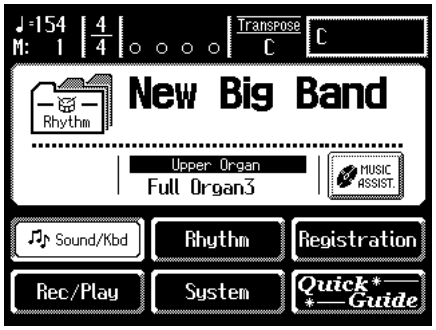
5. Touch <Exit>.



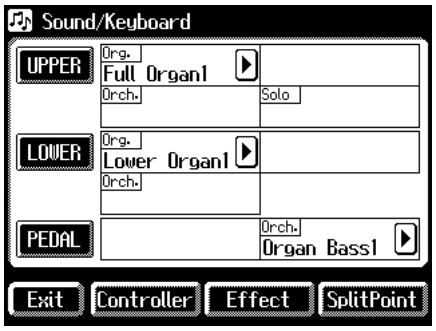
■ Changing the Solo Split Point

This setting is used to determine the Solo Split Point (lower limit of the playable range of the Solo voice) on the Lower keyboard to any desired position.

1. Touch <Sound/Kbd> on the Main screen.

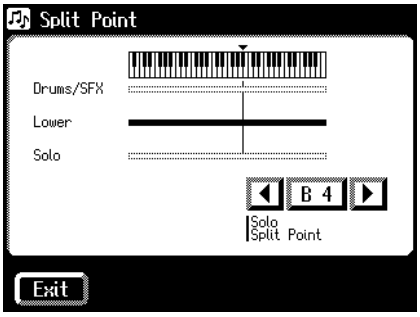


The Sound/Keyboard screen appears.



2. Touch <Split Point>.

The Split Point screen appears.



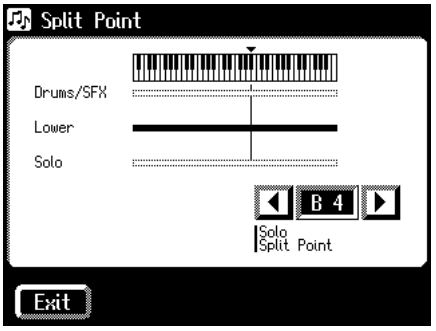
3. Touch <◀><▶> to change the Solo Split Point.

Settings **A1 to C7**

4. Touch <Exit>.

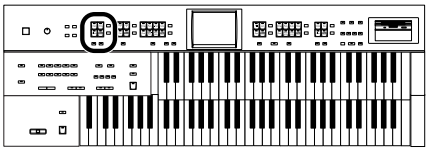
MEMO

You can also set the split point by pressing the key of the lower keyboard that you want to be the Solo Split Point.



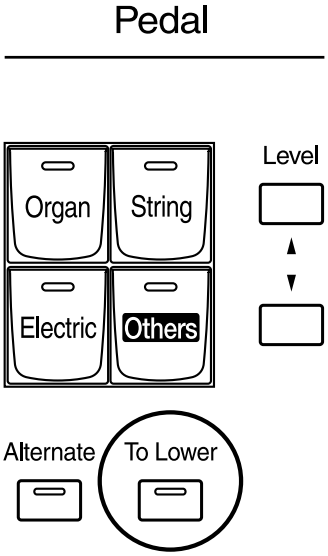
1. While touching the Solo Split Point value (A1–C7 indication) in the Split Point screen, press the key in the Lower keyboard that you want to specify as the Solo Split Point.

The Solo Split Point will be set in the Split Point screen.



Using the Lower Keyboard to Play the Bass Voice (Pedal [To Lower] Button)

By using the Pedal [To Lower] button, you can sound the Pedal Bass voice by playing the root note (see p. 212) of a chord on the Lower keyboard in the area that is playing the Lower voice.



1. Select a Pedal Bass voice (p. 37).

2. Press the Pedal [To Lower] button (indicator lights).

When you play a chord in the area of the Lower keyboard that sounds the Lower voice, the Pedal Bass voice will also be heard and will play the root note.

If the "Leading Bass" function is on (p. 62), the lowest note played in the lower keyboard will sound the pedal bass voice.

3. Press the Pedal [To Lower] button (indicator turns off).

The Pedal Bass voice will no longer sound in the Lower keyboard.

NOTE

If no portion of the Lower keyboard is sounding the Lower voice (the [Drums/SFX] button is ON), the Pedal Bass voice will not sound.

NOTE

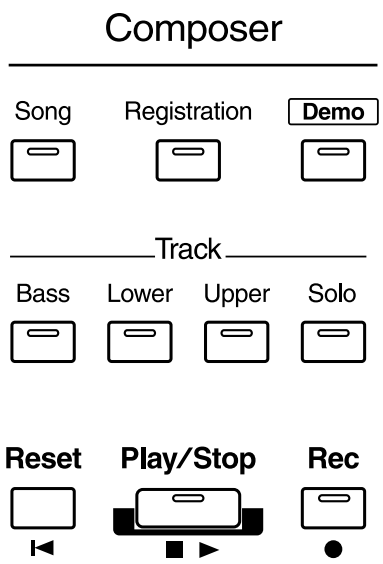
If the Pedal [To Lower] is ON, the Pedal Bass voice will not be heard from the Pedalboard.

Chapter 7 Recording/Playing Back What You Play

The internal composer can record performances and play back commercial SMF music files.

The composer can be used in the following two ways.

Using the Panel Composer Buttons



Button	Description
Reset	Returns you to the beginning of the song.
Play/Stop	Starts and stops playback of the song.
	After the [Rec] button has been pressed, putting the composer in record standby mode, recording then starts when the [Play/Stop] is pressed.
Rec	The unit switches to record standby mode. * In record standby, the [Rec] button is lit, and the [Play/Stop] button flashes.
Song	The Song Select screen appears in the display.
Demo	When you press the [Demo] button while a floppy disk is in the disk drive, all of the songs on the floppy disk are played back one after another.
	(When no floppy disk is in the disk drive) The Demo screen opens.
Track	The indicator alternately switches on and off each time the button is pressed. You can mute the voices on a particular track by turning off the track button's light. → For more about the track buttons, refer to p. 129.

MEMO

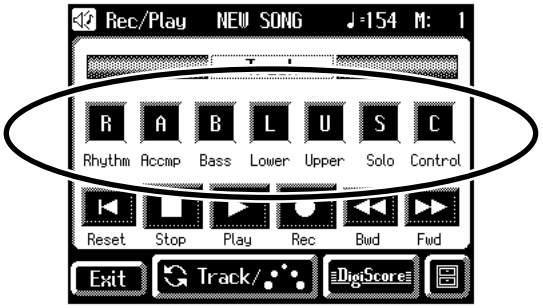
The "Bass," "Lower," "Upper," and "Solo" track buttons on the panel function in the same way as the track buttons in the Rec/Play screen.

Touching <Rec/Play> in the Main Screen to Open the Rec/Play Screen and Using the Rec/Play Screen's Composer Buttons

Button	Description
Track **Rhythm** **Accmp** **Bass** **Lower** **Upper** **Solo** **Control**	Buttons for tracks to which performances are recorded light up. A lighted button can be toggled between lighted and unlit by pressing it. Tracks are muted when the button's light is off. → For more about the track buttons, refer to p. 129.
Reset	Returns you to the beginning of the song.
Stop	Stops playback of the song.
Play	Starts playback of the song.
	After <Rec> has been touched to put the composer in record standby mode, recording then starts when you touch <Play>.
Rec	The unit switches to record standby mode. * In record standby, <Rec> is lit, and <Play> flashes.
Bwd	Rewinds the song.
Fwd	Fast forwards the song.
Track/	You can toggle between display of the track buttons, the bouncing ball, or track mute buttons by touching the button.
DigiScore	The Notation screen appears in the display.
	The Utility screen for the Composer is displayed.

■ What is a Track Button?

The recorded performance will be automatically assigned to the seven Track buttons according to the recorded part. You can record or play back independently by specifying the desired Track button; for example, when you wish to re-record a track.

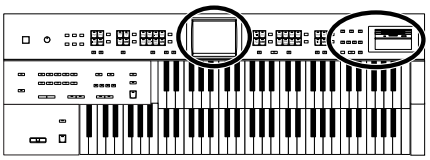


You can record different kinds of performance data into each track:

Track	Recorded performance
Rhythm	Rhythm performance, Drums/SFX
Accmp	Automatic Accompaniment (except Bass)
Bass	Bass part of the Automatic Accompaniment, Pedal Bass Voice Performance Data (Note, Bender, Modulation)
Lower	Lower Voice Performance Data (Note, Hold, Bender, Modulation)
Upper	Upper Voice Performance Data (Note, Hold, Bender, Modulation)
Solo	Solo Voice Performance Data (Note, Hold, Bender, Modulation)
Control	Glide
	Expression
	Reverb Type
	Reverb Depth
	Solo [To Lower] button (ON/OFF)
	Pedal [To Lower] button (ON/OFF)
	Transpose [-] [+] button setting
	[Harmony Intelligence] button (ON/OFF)
	Harmony Intelligence Type
	Rotary [Fast/Slow] button (ON/OFF)
	Rotary [ON/OFF] button (ON/OFF)
	Pedal Bass Mode
	Solo Mode
	Solo To Lower Mode
	Solo Split Point
	Sustain ON/OFF
	Sustain Length
	Initial Touch
	Wall Type
	The Voices assigned for each part
	Level [▲][▼] (Part Balance Volume)
	The Reverb depth for each part
	The Chorus settings (ON/OFF) of the voice
	The Octave settings for each part
	[Drums/SFX] button (ON/OFF)
	Drums/SFX Set
	Chord Intelligence
	Chord Hold
	Leading Bass
	Lower Voice [Hold] button (ON/OFF)
	Tempo setting
	Volume of the rhythm Accompaniment part
	Reverb depth of the rhythm Accompaniment part
	Volume of the rhythm drum part
	Reverb depth of the rhythm drum part
	Volume of the rhythm bass part
	Reverb depth of the rhythm bass part

MEMO

More information about the track assignments when playing commercial SMF music files, please refer to page 132.



During recording, the control track will store the operations as follows.

- Recording panel operations (Voice selections, Tempo changes, Rotary fast/slow etc.)
  Newly recorded performance data will be added without erasing the previously recorded data.
- Recording expression pedal operations
  This will depend on the function of the expression pedal. Recording of expression operations will differ depending on the setting for "Exp. Src (Rec)."
  For details refer to "Changing the Function of the Expression Pedal" (p. 170).

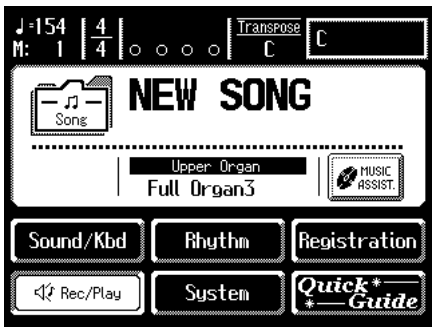
MEMO

If you wish to erase all the recorded data and record new performance data, use the editing function "Erase" (erase performance data) to erase the data (p. 153).

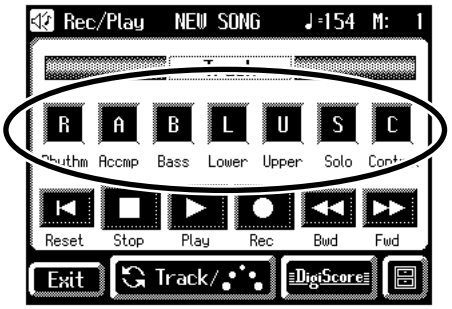
■ Displaying the Track Buttons

The track buttons will be displayed in the screen when you record or play back a performance.

1. Touch <Rec/Play> on the Main screen.



The Rec/Play screen appears.
The following buttons are referred to as the track buttons.



MEMO

All accompaniment data is grouped to the "Accmp" track button in the Rec/Play screen. In the same manner, the rhythm performance data is grouped to "Rhythm."
If you want to mute only a portion of the rhythms or accompaniment, open up the Track Mute screen, and switch off the Track Mute buttons there (p. 133).

Playing Back SMF Music Files and Performance Data on Disks

In addition to playing back the music you recorded on the instrument and saved to a floppy disk, AT-45 also lets you enjoy a wide variety of commercially available song files, such as defined below.

SMF Music Files

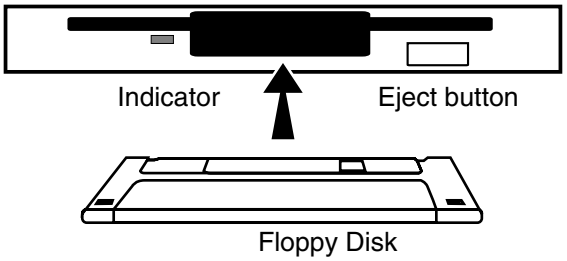
The Standard MIDI File (SMF) format was designed to provide a means for exchanging performance data among a wide variety of devices. In addition to the song files described earlier, the AT-45 is also capable of playing back any Standard MIDI File compatible with the General MIDI 2 or GS formats.

To play back only one song

1. Hold the floppy disk with the label facing upwards, and push it into the disk drive until it clicks into place.

MEMO

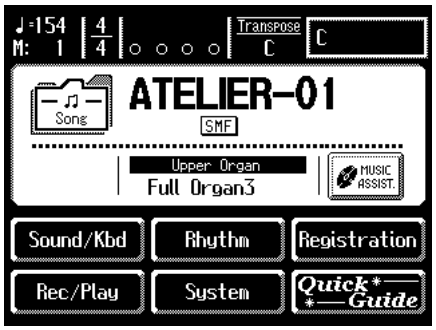
The disk drive is on the right side of the unit, above the keyboard.



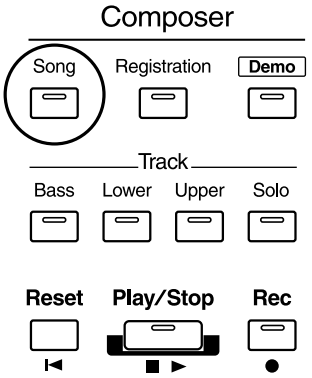
NOTE

Never eject a disk while reading or writing is in progress, since that can damage the magnetic surface of the disk, rendering it unusable. (The disk drive's indicator will light up at full brightness when the drive is busy reading or writing data. Ordinarily, the indicator will be less brightly lit, or be extinguished.)

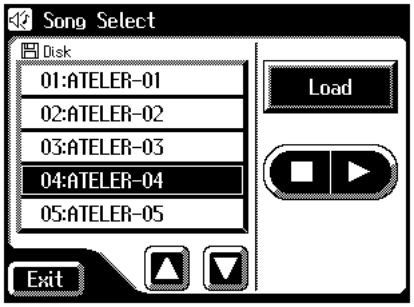
When the performance song loaded from a disk is a Standard MIDI File, "SMF" will be displayed on the Main screen.



2. Press the [Song] button.



The Song Select screen appears.



3. In the screen, touch <▲><▼> to select the song that you wish to play back.

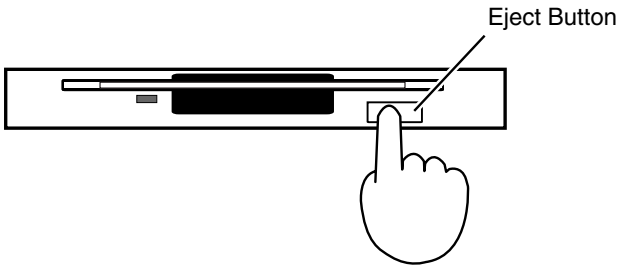
4. Touch <■▶> to play back the song.

5. Touch <■▶> to stop the song.

MEMO

You can also play back or stop the music files by touching <Play> or <Stop> in the Rec/Play screen. By touching <Bwd> or <Fwd> you can rewind or fast-forward the performance.

6. Press the Eject button to eject the floppy disk.



The floppy disk is ejected a little out of the slot. Gently grasp the end of the floppy disk and pull it out.

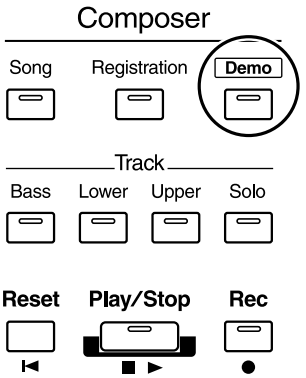
Playing back all performance data

1. Hold the floppy disk with the label facing upwards, and push it into the disk drive until it clicks into place.

MEMO

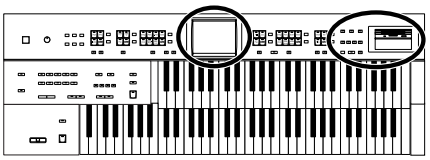
The disk drive is on the right side of the unit, above the keyboard.

2. Press the [Demo] button.



All performance data saved on the floppy disk will be played consecutively.

3. To stop playback, press the [Play/Stop] button.



Silencing a Specific Track (Track Mute)

When the Rec/Play screen is displayed, the track button will light to indicate a track in which a performance has been recorded. By turning off these track buttons, you can temporarily silence the sound. This is referred to as "Track Mute."

1. Touch <Rec/Play> on the Main Screen

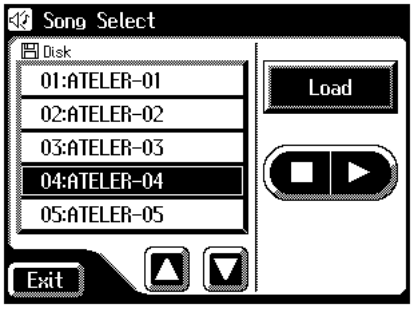
The Rec/Play screen appears.

2. Touch < > (Utility).

The Utility screen appears.

3. Touch <Song Select>.

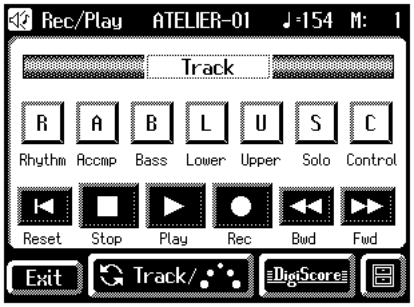
The Song Select screen appears.



4. In the screen, touch <▲><▼> to select the song that you wish to play back.

5. Touch <Load>.

The Rec/Play screen appears.

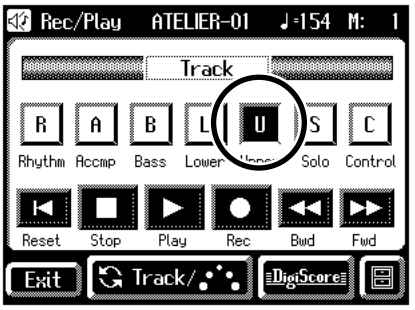


MEMO

All accompaniment data is grouped to the "Accmp" track button in the Rec/Play screen. In the same manner, the rhythm performance data is grouped to "Rhythm."
If you want to mute only a portion of the rhythms or accompaniment, open up the Track Mute screen, and switch off the Track Mute buttons there (p. 133).

6. Press a track button that is lit, extinguishing the button.

When you play back the performance, track buttons that are not lighted will be muted (silenced).



7. Press the track button once again (button lights).

The part that had been muted will return to normal and will be heard.

Correspondence Between Track Buttons and Track Mute Buttons When Playing Back Commercial SMF Music Files

Track button	Channel
Rhythm	10
Accmp	5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16
Bass	2
Lower	3
Upper	4
Solo	1

Correspondence Between Track Buttons and Track Mute Buttons When Playing Back Performance Data Created with an Music Atelier

Track button	Track Mute button
Rhythm	10, 11 (Drums/SFX), 13 (Manual Percussion)*
Accmp	5, 6, 7, 8, 9, 12, 14, 15
Bass	2 (Bass)
Lower	3 (Lower)
Upper	4 (Upper)
Solo	1 (Solo)
Control	16

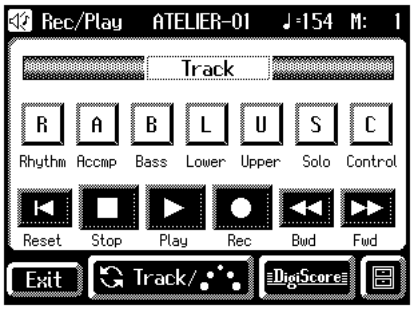
* *Track Mute button 13 is not used if the instrument does not feature Manual Percussion.*

■ Muting Individual Tracks of Performance Data

All accompaniment data is grouped to the "Accmp" track button in the Rec/Play screen. In the same manner, the rhythm performance data is grouped to "Rhythm."
You can mute only a portion of the rhythms or accompaniment on the Track Mute screen.

1. Touch <Rec/Play> on the Main screen.

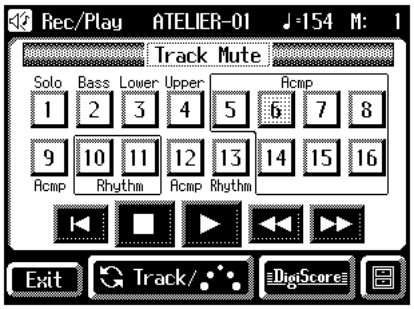
The Rec/Play screen appears.



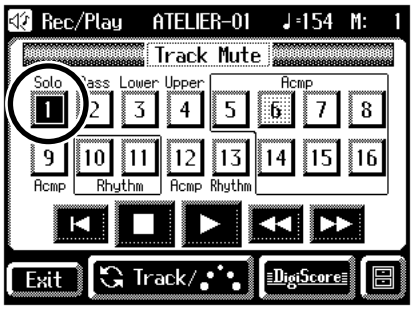
2. Touch < Track/ > a number of times.

The Track Mute screen appears.

Sixteen Track Mute buttons appear in the display. From the left, these are "Track 1, Track 2 ... Track 15, and Track 16."



3. Touch the screen to select the track that you wish to mute.



The button you've touched goes out, indicating the sound is muted.

4. When you touch an unlit Track Mute button, the Track Mute button light comes on, and the track mute is cancelled.

5. Touch <Exit>.

NOTE

Track mute will be defeated when you perform the following operations.

- Select different performance data.

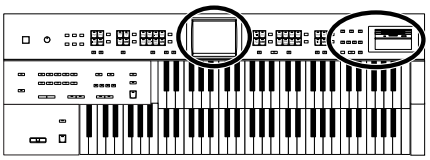
The seven Track Mute buttons in the Rec/Play screen (p. 130) correspond to the sixteen Track Mute buttons of the Track Mute screen as shown below.

Commercial SMF Music Files

Track Mute Button	Track Button
1 (Solo)	Solo
2 (Pedal)	Pedal
3 (Lower)	Lower
4 (Upper)	Upper
5–9, 11–16 (Acmp)	Accmp
10 (Rhythm)	Rhythm

Performance Data Created on the Atelier

Track Mute Button	Track Button
1 (Solo)	Solo
2 (Pedal)	Pedal
3 (Lower)	Lower
4 (Upper)	Upper
5–9, 12, 14–15 (Acmp)	Accmp
10 (Rhythm)	Rhythm
11 (Drums/SFX)	Rhythm



Viewing a Notation

You can display the notations of performances from music files and recordings made on the AT-45. This is very convenient when you want to read the music as you play and to confirm recorded songs.

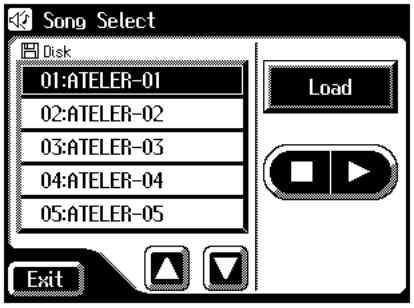
Selecting Songs

→ *There is no need to select the song when displaying notations for performances recorded with the Composer. Start from Step 5.*

1. Take the floppy disk containing the song whose notation you want to display and insert it into the floppy disk drive.

2. Press the [Song] button.

The Song Select screen appears.



3. Touch <▲><▼> to select the song that you want to display the notation.

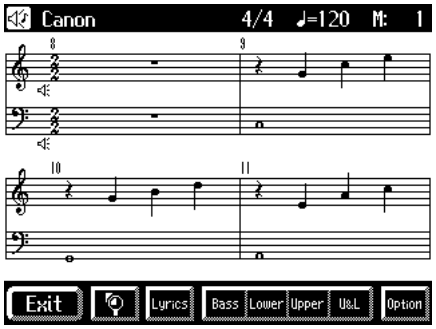
4. Touch <Load>.

After the song is loaded, the Rec/Play screen opens.

Displaying Notations

5. Touch <DigiScore> on the Rec/Play screen.

The Notation screen appears.



Display	Explanation
	Enlarge the notation display.
Lyrics	Display lyrics in the notation.
Bass	Display the Bass part notation.
Lower	Display the Lower part notation.
Upper	Display the Upper part notation.
U&L	Display the Upper part and Lower part notations.
Option	You can change the part that is displayed, and change the way in which the notation is displayed (p. 135).

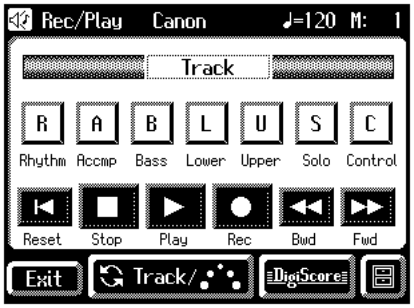
MEMO

Touching the illustration of speaker on screen, you can mute the part. This is convenient when you want to practice with a specific part muted. Touch the speaker icon once more to have the sound play again.

■ Changing the Notation Settings

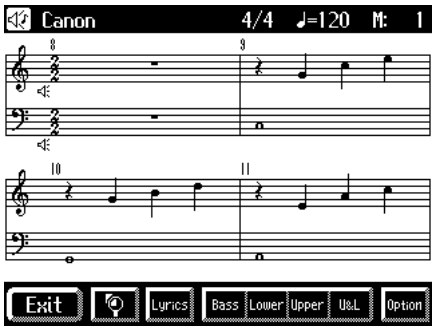
1. Touch <Rec/Play> on the Main Screen

The Rec/Play screen appears.



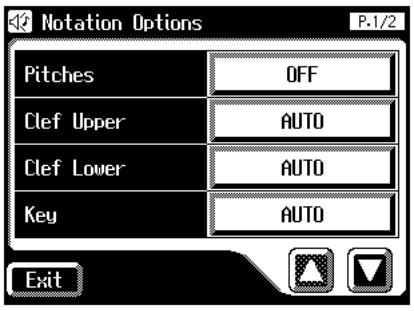
2. Touch <DigiScore>.

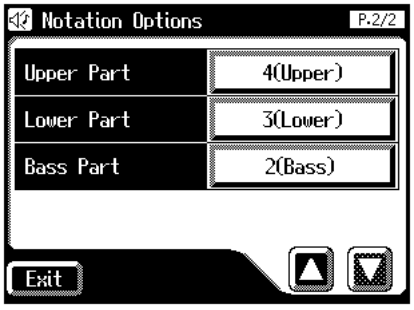
The Notation screen appears.



3. Touch <Option>.

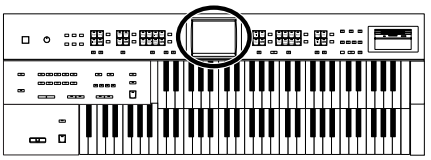
The Notation Options screen appears.



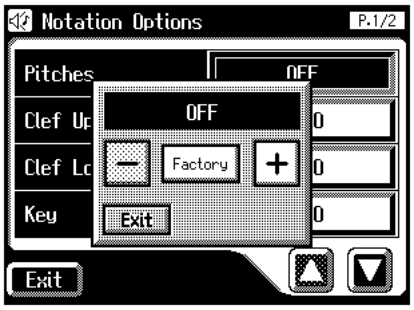


4. Touch the button for the item whose setting you want to change.

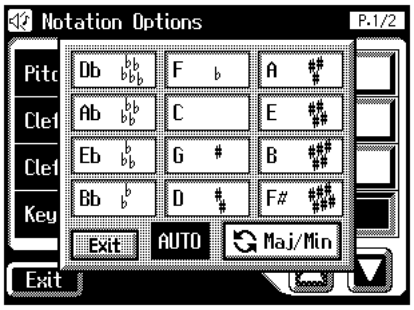
Menu	Setting	Explanation
Pitch	OFF	Not displayed
	C,D,E	Letter names (fixed do) are display in the detailed notation.
	Do,Re,Mi	Solmization syllables (movable do) are displayed in the detailed notation.
Clef Upper	AUTO	Display is switched automatically.
	G Clef	Displayed the G-clef staff of the upper part.
	F Clef	Displayed the F-clef staff of the upper part.
Clef Lower	AUTO	Display is switched automatically.
	G Clef	Displayed the G-clef staff of the lower part.
	F Clef	Displayed the F-clef staff of the lower part.
Key	AUTO	Key is switched automatically.
	Db, Ab, Eb, Bb, F, C, G, D, A, E, B, F#, Bbm, Fm, Cm, Gm, Dm, Am, Em, Bm, F#m, C#m, G#m, D#m	Display the notation in the selected key.
Upper Part	1–16	Select the part to be displayed as the upper part.
Lower Part	1–16	Select the part to be displayed as the lower part.
Bass Part	1–16	Select the part to be displayed as the bass part.

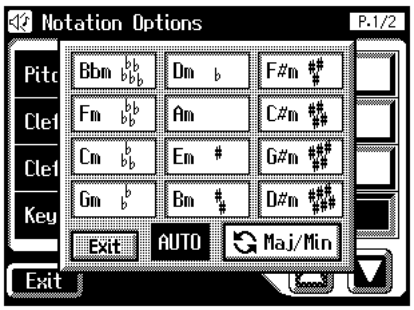


5. Touch <[−]><[+]> to change the setting.



When you touch <Key>, the following screen appears.





MEMO

The Key screen is composed of two screens. Touch <[Maj/Min]> to switch between the two screens.

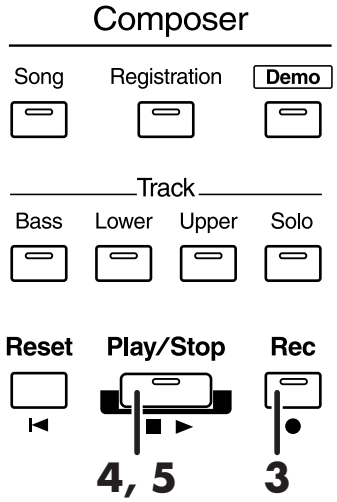
6. Touch <Exit>.

Some notes on a Notation screen

- When you start playback of music files, the marks appears. While this appears on the notation, the AT-45 is reading data. Please wait until reading of the data is complete.
- In the Notation screen, some lyrics or notes could extend beyond the edges of the screen, and not be displayed.
- The notations that are presented by the display are produced based on the music files. Viewing ease is given priority over precise expression when dealing with complex, high-level music. Because of this, you may find that the notation shown in the display does not match what is provided on commercially available sheet music. The notation display feature is particularly unsuitable for the display of difficult, complex musical works that demand accurate notation. In addition, the display cannot show notes that are briefer than a sixteenth note.
- If you select a part that does not contain performance data, notes will not be displayed in the notation. Use <Option> to change the part that is displayed.
- If you use the buttons located below the display to change the displayed part while the song is playing, the song may be played back from the beginning.

Recording a Performance

You can record the performance that you play. You can also record your performance while playing rhythms or automatic accompaniment.



1. **Select the panel settings needed for recording the performance.**
2. **Make sure that a floppy disk is not inserted in the disk drive.**

   If a floppy disk is in the disk drive, press the Eject button (p. 131) and remove the floppy disk.
3. **Enter the recording standby mode by pressing the [Rec] button.**

   The [Rec] button indicator will light, and the [Play/Stop] button will blink.
4. **Press the [Play/Stop] button to start recording.**

   When you press the [Play/Stop] button, the metronome will play two measures (bars) of count-in before recording begins.

MEMO

If you wish to use Rhythm and Automatic Accompaniment as you record, press the [Start/Stop] button instead of the [Play/Stop] button to begin recording. Also, if the [Sync Start] button is lit (i.e., if Sync Start is ON), recording will begin the instant you play the Lower keyboard.

5. **Press the [Play/Stop] button when you have completed your recording.**

   The Track buttons' indicator where a performance song is recorded will change from a flashing to a constant light.
   When you press the [Intro/Ending] button (or [Start/Stop] button) while recording a Rhythm performance or Automatic Accompaniment, the Rhythm performance and Automatic Accompaniment will stop. However, the recording itself will continue. Press the [Play/Stop] button to stop recording.

MEMO

The Play and Stop functions can both be assigned to one of the foot switches located on each side of the Expression Pedal (p. 105).

MEMO

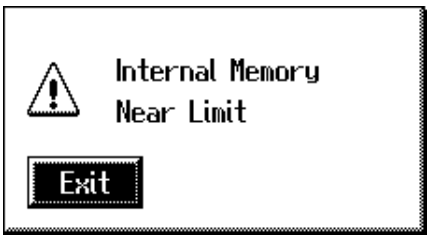
You can also choose to cancel the metronome count-in before recording starts (p. 149).

Caution

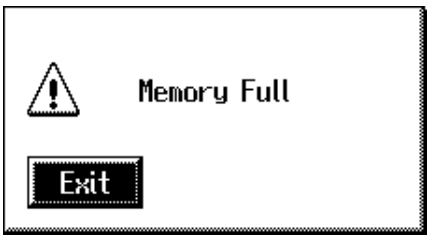
If you press the [Rec] button when a song has been selected from the floppy disk, the selected song will be completely loaded into the AT-45 and the Composer will enter into the recording standby mode. To record a new song, use the following procedure.

1. **Press the [Rec] button to cancel recording standby.**
2. **Take the floppy disk out of the disk drive.**
3. **Delete the performance data (p. 141).**
4. **Press the [Rec] button.**

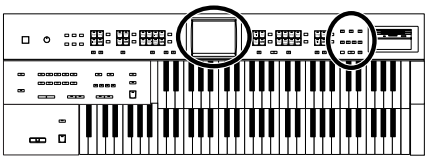
The following screen appears



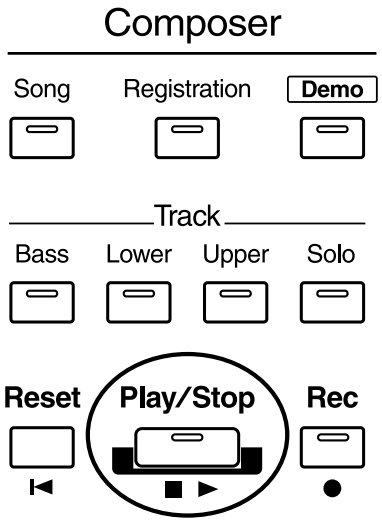
When the instrument's memory is nearing capacity.



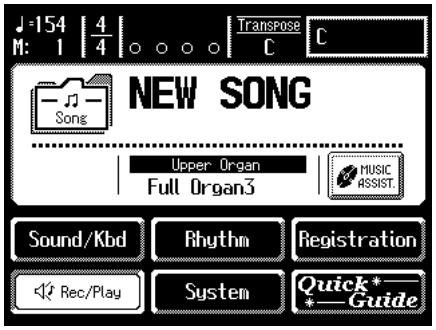
When recording was automatically canceled because the memory limit was reached.



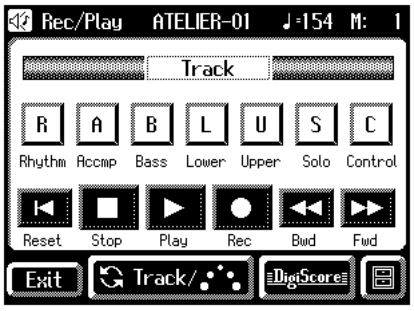
Playing Back a Performance Song



1. Touch <Rec/Play> on the Main screen.



The Rec/Play screen appears.



2. Touch <Reset>.

The location at which playback will start will return to the beginning of measure 1.
If you wish to begin playback from the middle of the song, touch <Bwd> <Fwd> to move to the measure from which you wish to begin playback.

3. Touch <Play> to begin playback.

After playback reaches the end of the performance, it will stop automatically.

MEMO

You can also begin playback by pressing the Composer [Play/Stop] button.

4. To stop playback at any point, touch the <Stop> button.

MEMO

You can also stop playback by pressing the Composer [Play/Stop] button.

MEMO

The Play and Stop functions can both be assigned to one of the foot switches located on each side of the Expression Pedal (p. 105).

MEMO

You can specify whether or not the Expression Pedal will affect the playback and what you play while Atelier music file is being played back (p. 170).

NOTE

If you load performance data (such as SMF music files) that was not designed for an ATELIER Series instrument and play it back, you may find, when playing rhythms and automatic accompaniment, that the music doesn't sound quite like it should. (For example, the wrong sounds could be played). If you want the data to be played back accurately, first press the [Reset] button prior to playback.

Add a Count Sound to Match the Timing (Count In Play)

In cases such as when you want to perform in time with a song, you can have a count sound played before playback of the song begins, allowing you to synchronize your own performance with the song.

Playing back a song after playing the count sound is called "Count In."

1. Hold down the [Reset] button and press the [Play/Stop] button.

The metronome will play two measures (bars) of count-in before recording begins.

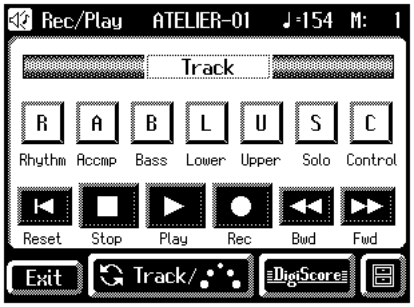
Recording Each Part Separately

In this method, each part (track button) is recorded one after another: first the Rhythm part, then the bass part, etc. If there are any previously recorded performances, you can listen to them as you record additional parts.

1. Select the panel settings needed for recording the performance.

2. Touch <Rec/Play> on the Main screen.

The Rec/Play screen appears.

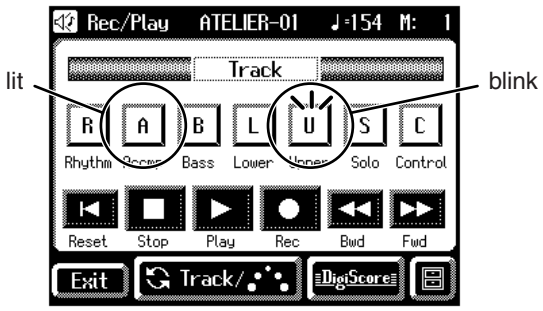


3. Touch the <Bwd> and <Fwd> buttons to select the desired measure (bar) when you start recording.

If you wish to start recording from the beginning of the song, touch the <Reset> button.

4. In the Rec/Play screen, touch <Rec> to enter recording-standby mode.

<Play> and the unrecorded track buttons in the screen will blink. The track buttons that are already recorded will light.



Also, the panel Composer [Rec] button indicator will light, and [Play/Stop] button will blink.

MEMO

You can also enter recording-standby mode by pressing the Composer [Rec] button.

5. In the Rec/Play screen, touch <Play> to begin recording.

When you touch <Play> in the Rec/Play screen, the metronome will sound a two-measure count, and then recording will begin.

As you listen to the performance song previously recorded, record the Part into a new Track.

MEMO

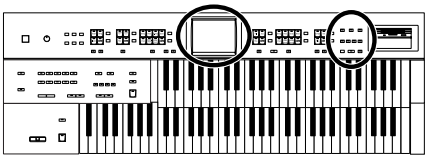
You can also start recording by pressing the Composer [Play/Stop] button.

6. In the Rec/Play screen, touch <Stop> to stop recording.

The track button for which performance data has been recorded will be lit.

MEMO

You can also stop recording by pressing the Composer [Play/Stop] button.



Re-Recording

If you made a mistake in your performance during recording etc., you can re-record just a portion of the musical data in the track.

NOTE

If you wish to re-record with different settings for voices, tempo, part balance, erase the recorded song (p. 141) and re-record again. If the Control track still contains data from before you re-recorded, the volume or sounds may change during playback.

1. Touch <Rec/Play> on the Main screen.

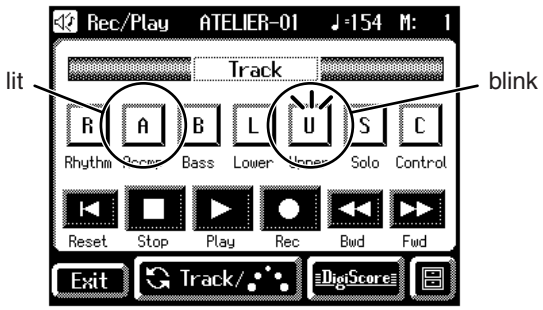
The Rec/Play screen appears.

2. Touch the <Bwd> and <Fwd> buttons to select the desired measure (bar) when you start recording.

If you wish to start recording from the beginning of the song, touch the <Reset> button.

3. In the Rec/Play screen, touch <Rec> to enter recording-standby mode.

<Play> and the unrecorded track buttons in the screen will blink. The button indicators of tracks that are already recorded will light.



Also, the panel Composer [Rec] button indicator will light, and [Play/Stop] button will blink.

MEMO

You can also enter recording-standby mode by pressing the Composer [Rec] button.

4. Touch the Track button which you wish to re-recording (button flashes).

The song data of the specified Track (with the exception of the Control Track) will be erased as new song data is recorded.

MEMO

When the Track button is lit constantly, no song data has been recorded on that Track.

5. In the Rec/Play screen, touch <Play> to begin recording.

The metronome will sound a two-measure count, and then recording will begin.

MEMO

You can also start recording by pressing the Composer [Play/Stop] button.

6. In the Rec/Play screen, touch <Stop> to stop recording.

The buttons of tracks which were re-recorded will change from flashing to being constantly lit.

MEMO

You can also stop playback by pressing the Composer [Play/Stop] button.

NOTE

If you wish to keep the existing Expression Pedal data, and record only the panel operations, you can make settings to prevent the operation of the Expression Pedal from being recorded (p. 170).

MEMO

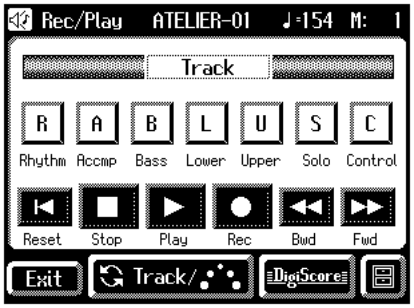
You can use punch-in recording (p. 147) to re-record only the area that you specify.

Erasing a Performance Song (Song Clear)

If you wish to discard your recording and re-record from the beginning, or if you wish to record a new performance, you must erase the previously-recorded data.

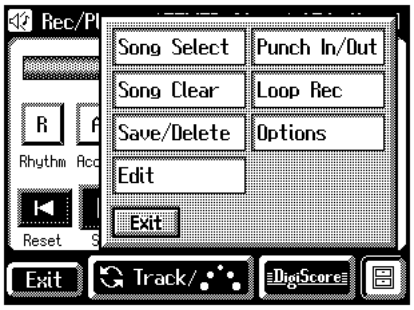
1. Touch <Rec/Play> on the Main screen.

The Rec/Play screen appears.



2. Touch < > (Utility).

The Utility screen appears.



3. Touch <Song Clear>.

The following message, asking you to confirm your choice, will be displayed.

If you touch <Cancel>, the performance data will not be erased, and you will return to the Rec/Play screen.

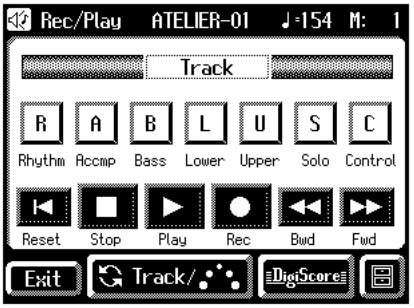
4. If you touch <OK>, the performance data will be erased.

Changing the Name of a Performance Song (Rename)

A name is automatically assigned to a performance song that you record. However, at some point you may wish to change the name to something more meaningful.

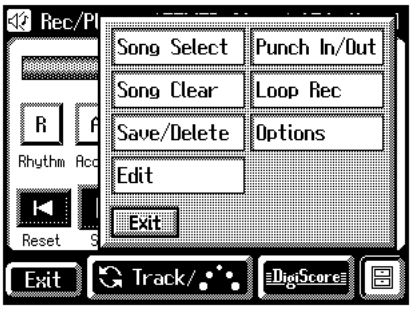
1. Touch <Rec/Play> on the Main screen.

The Rec/Play screen appears.



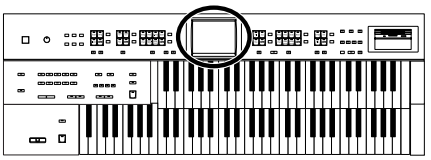
2. Touch < > (Utility).

The Utility screen appears.



3. Touch <Save/Delete>.

The Song Save/Song Delete screen appears.

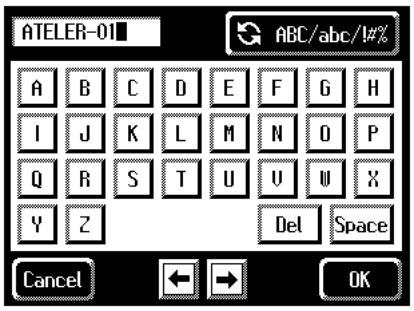


4. Touch <Utility> to open the Utility screen.

The Utility screen appears.

5. Touch <Rename>.

The Rename screen appears.



You can also access the Rename screen as follows.

1. Touch <[ ]> (Utility) on the Rec/Play screen.

The Utility screen appears.

2. In the Utility screen, touch <Edit>.

The Edit Menu screen appears.

3. Touch <Rename> on the Edit Menu screen.

The Rename screen appears.

6. Touch the character select button (ABC/abc/!#%)to switch among uppercase/lowercase/symbols.

Touch the character select button repeatedly to cycle through the available choices, like this: uppercase → lowercase → symbols → uppercase...

7. Touch the screen to specify the desired character.

The following characters can be selected.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z	
a b c d e f g h i j k l m n o p q r s t u v w x y z	
! " # % & ' ( ) * + , - . / : = ? ^ _ 0 1 2 3 4 5 6 7 8 9	
Del	Deletes a character.
Space	Inserts a space (blank).
← →	Move the cursor (the symbol that indicates the location at which characters will be input) to left or right.

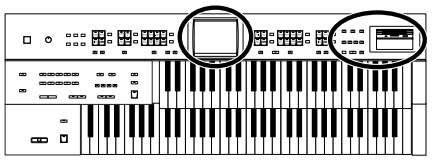
To cancel operation, touch <Cancel>.

8. When you're done making the settings, touch <OK>.

The new name is now inserted.

NOTE

You cannot directly change or edit the name of a performance song stored on a disk. The song must first be loaded (p. 144) into the instrument, edited, and then saved to disk again.



Saving Performance Songs Onto Floppy Disk

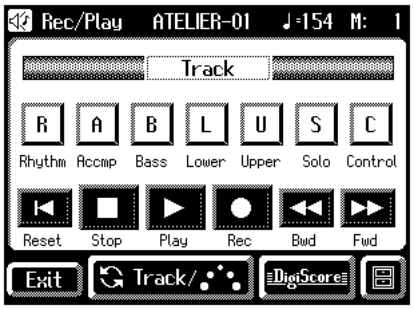
The performance data that you recorded will disappear when the power of the AT-45 is turned off. If you wish to keep the performance data, you can save it on a floppy disk.

If the performance data has never been saved to a floppy disk, a " EDITED " symbol appears on the Main screen. When the performance data is saved to a floppy disk, this symbol will no longer be displayed.

1. Make sure that the disk drive contains a disk that was formatted by the AT-45.

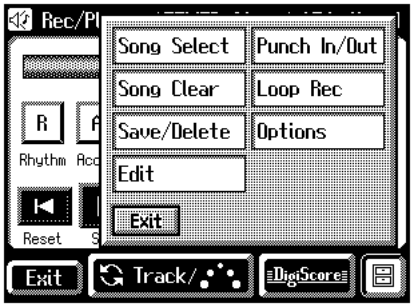
2. Touch <Rec/Play> on the Main screen.

The Rec/Play screen appears.



3. Touch < > (Utility).

The Utility screen appears.



4. Touch <Save/Delete>.

The Song Save/Song Delete screen appears.

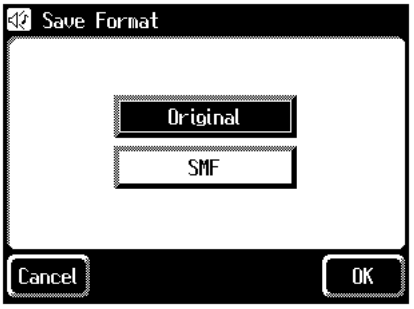
5. Touch < >< > to select the number of the save destination.

Numbers which have not been used in the saving operation will be displayed as "- - - - -."

To cancel the Save operation, touch the <Exit> to close the Song Save/Song Delete screen.

6. Touch <Save>.

The Save Format screen appears.



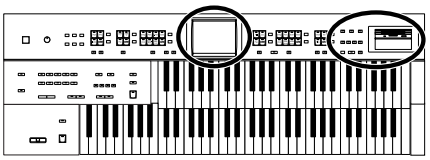
7. Touch the screen to select the format in which the data will be saved.

You can select either "ORIGINAL" or "SMF" format.

Display	Description
ORIGINAL	Save data in Atelier format
SMF	Save data in SMF format

8. Touch <OK> to finalize the save format.

Saving of the performance data will begin.



NOTE

Music files that was saved in Atelier format cannot be played back correctly on instruments other than the Atelier series.

NOTE

SMF data saved by the Atelier is saved for use with Atelier sound generators. For this reason, such data cannot be played back properly by the sound generator of an instrument that is not a member of the Atelier series.

NOTE

Saving performance data in SMF format (SMF) requires a longer time than saving it in Atelier format (ORIGINAL).

If the following screen appears

If you select a number at which a performance data has already been saved and touch <Save>, the following screen appears.

If you wish to update the contents of the performance data

1. **Touch <OK>.**

If you wish to save the data without erasing the performance data already on disk you must rename the song

1. **Touch <Cancel> to stop the Save operation.**
2. **In the Song Save/Song Delete screen, select the number that is displayed as "-----" (a number that currently does not contain performance data).**
3. **Save the performance data.**

   When saving is complete, the saved performance name will be displayed.

What is the SMF Format?

SMF (Standard MIDI File) is a data format that was created to provide music files compatibility between manufacturers.

Loading Performance Songs Into the AT-45

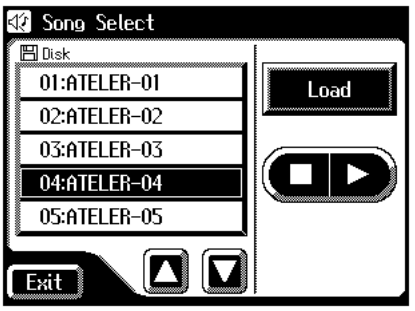
To edit (p. 150) or re-record a performance song that is stored on a floppy disk, you must first load that song into the instrument.

1. **Insert the floppy disk into the disk drive.**
2. **Touch <Rec/Play> on the Main screen.**

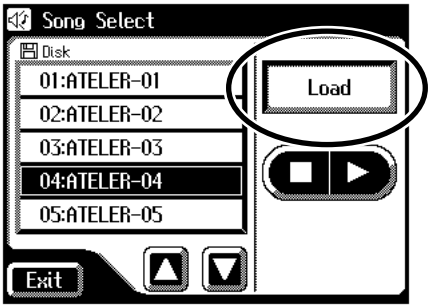
   The Rec/Play screen appears.
3. **Touch <[ ]> (Utility).**

   The Utility screen appears.
4. **Touch <Song Select>.**

   The Song Select screen appears.



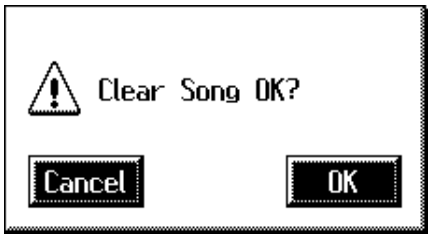
5. **Touch <[ ]><[ ]> to select the performance data that you wish to load into internal memory.**
6. **Touch <Load>.**



The selected performance data will be loaded into internal memory.

If the following screen appears

The message below is shown when the performance song in the unit has not been saved to disk.



If you wish to erase the performance song

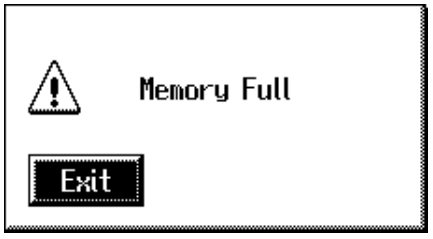
1. **Touch the <OK> button.**

If you wish to save the performance song on a floppy disk

1. **Touch the <Cancel> button.**

   Save the song on a floppy disk (p. 143).

If loading is canceled because the memory limit has been reached, the following message will be displayed:



Deleting Performance Songs Stored on Disk

You can delete a performance song that was saved onto a floppy disk.

1. **Insert the floppy disk containing the performance data into the disk drive.**
2. **Touch <Rec/Play> on the Main screen.**

   The Rec/Play screen appears.
3. **In the lower right of the screen, touch <** **> (Utility).**

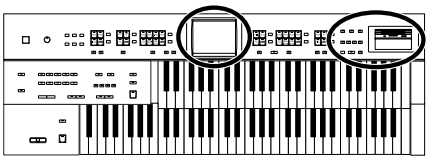
   The Utility screen appears.
4. **Touch <Save/Delete>.**

   The Song Save/Song Delete screen appears.

5. **Touch <** **><** **> to select the performance data that you wish to delete.**
6. **Touch <Delete>.**

   The confirmation message appears.

   If you touch <Cancel> the performance data will not be deleted.
7. **When you touch <OK> the performance data will be deleted.**



Layering a New Recording onto SMF Music Files

You can load commercially available SMF music files into the AT-45, and record your own performance on top of it. During recording, the data you've loaded will be played back, while you record your performance.

1. Insert a floppy disk containing commercially available SMF music files into the floppy disk drive.

2. Touch <Rec/Play> on the Main screen.

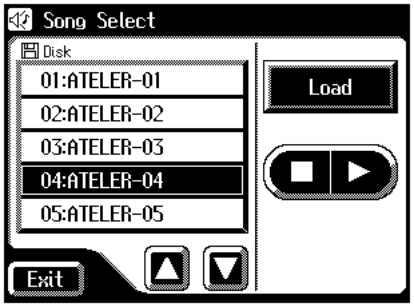
The Rec/Play screen appears.

3. Touch <[icon]> (Utility).

The Utility screen appears.

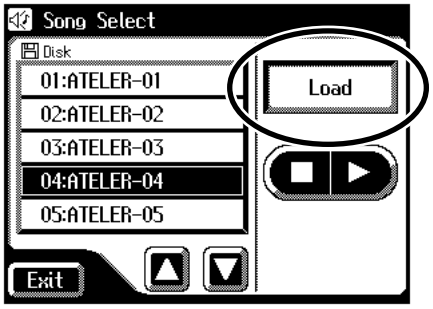
4. Touch <Song Select>.

The Song Select screen appears.



5. Touch <[icon]><[icon]> to select the performance data that you wish to load into internal memory.

6. Touch <Load> (load performance data).



The selected performance data will be loaded into internal memory.

For track assignments of SMF format performance data loaded to the AT-45, refer to p. 132.

7. Select the panel settings needed for recording the performance.

8. Touch the <Bwd> button and <Fwd> button to move to the measure at which you wish to begin recording.

9. In the Rec/Play screen, touch <Rec> to enter recording-standby mode.

<Play> and unrecorded track buttons in the screen will blink. The button indicators of tracks that are already recorded will light.

Also, the panel Composer [Rec] button indicator will light, and the [Play/Stop] button will blink.

MEMO

You can also enter recording-standby mode by pressing the Composer [Rec] button.

10. Touch the Track button which you wish to re-recording (button flashes).

11. In the Rec/Play screen, touch <Play> to begin recording.

As you record, the music file that was loaded into the AT-45 will play back.

12. In the Rec/Play screen, touch <Stop> to stop recording.

The track button for which performance data has been recorded will be lit.

MEMO

You can also start and stop recording by pressing the Composer [Play/Stop] button.

MEMO

The performance data you recorded can be saved on a floppy disk (p. 143).

NOTE

Commercially sold music files can also be loaded into the AT-45, but for reasons of copyright protection, cannot be saved in SMF format.

Using Song with a Different Tempo Than That of the Performance Song

1. **Insert the floppy disk containing the performance song whose tempo you want to change into the disk drive.**
2. **Load the performance data into the unit (p. 144).**
3. **Determine the tempo with the Tempo [◄] [►] buttons.**
4. **Hold down the panel [Reset] button and press the [Rec] button.**

NOTE

You cannot carry out this operation with the <Reset> and <Rec> in the Rec/Play screen.

Re-Recording Part of Your Performance (Punch-in Recording)

After you have recorded a performance, you can re-record a specified portion of the performance.

With this method, you listen to the recorded performance, and re-record just the desired area. This recording method is called "Punch-in Recording."

To Specify the Segment to be Recorded Over Again

1. **Touch <Rec/Play> on the Main screen.**

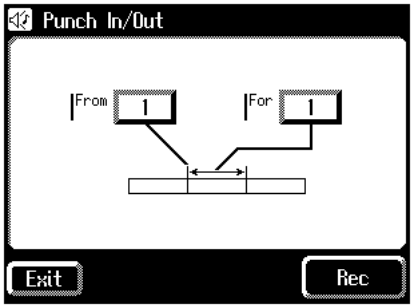
   The Rec/Play screen appears.

2. **Touch <[ ]> (Utility).**

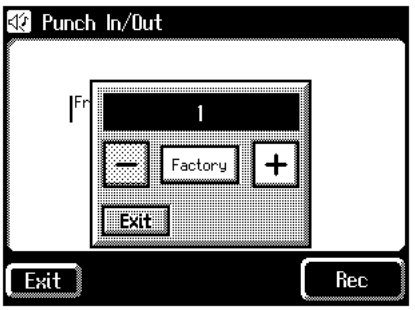
   The Utility screen appears.

3. **Touch <Punch In/Out>.**

   The Punch In/Out screen appears.



4. **Touch the "From" value (the measure at which recording will begin).**



5. **Touch <[−]><[+]> to specify "From" (the measure at which recording will begin).**
6. **Touch the "For" value (the number of measures that will be re-recorded).**
7. **Touch <[−]><[+]> to set "For" (the number of measures that will be re-recorded).**
8. **Touch <Rec>.**

   The Rec/Play screen appears, and the unit is placed in recording standby.

To Record While Listening to the Song

9. **Press the Track button which you wish to re-record (indicator flashes).**
10. **Touch <Play> to begin recording.**

    When you touch <Play>, the metronome will play two measures (bars) of count-in before recording begins.

    When you reach the first measure of the specified area, recording will begin. When the specified area ends, recording will end, and playback will resume.

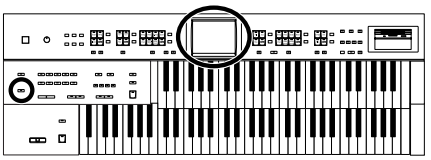
    While the song is playing back or recording, the Composer [Rec] button's indicator will be lit as follows.

While the performance is playing back	The Composer [Rec] button's indicator will flash
While you are re-recording	The Composer [Rec] button's indicator will light constantly

    When recording has ended for the specified area and the data is once again playing back, the [Rec] button's indicator will resume flashing.

11. **Touch <Stop> to stop the recording.**

    The indicator of the track button which recorded the performance will light.



Recording and Layering Drum Parts (Loop Recording)

You can repeatedly record over a specified region of the rhythm part, adding additional notes at each pass. This type of recording is called "Loop Recording."

This recording method is convenient when you wish to layer drum sounds individually for the Rhythm part.

NOTE

"Loop Recording" can be used only when recording the Rhythm part.

1. Press the [Drums/SFX] button to select a Drum Set or Sound Effect Set (p. 48).

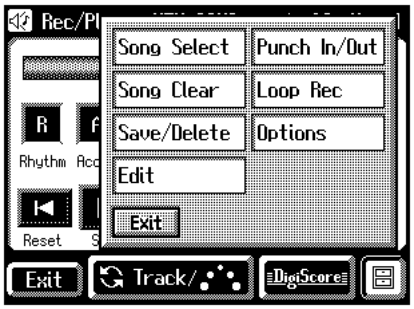
2. Touch <Rec/Play> on the Main screen.

The Rec/Play screen appears.

3. Touch the <Bwd> and <Fwd> on the Rec/Play screen, move to the measure where you wish to start Loop Recording.

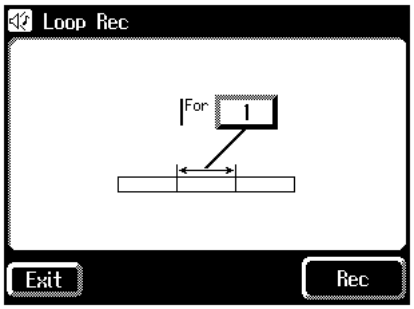
4. Touch < > (Utility).

The Utility screen appears.

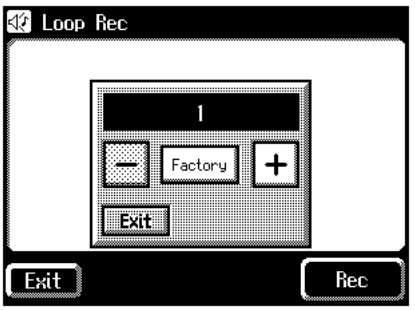


5. Touch <Loop Rec>.

The Loop Rec screen appears.



6. Touch the "For" value (the number of measures that will be recorded repeatedly).



To cancel operation, touch <Exit>.

7. Touch <−><+> to specify the "For" value (the number of measures that will be recorded repeatedly).

8. Touch <Rec>.

The Rec/Play screen appears, and the unit is placed in recording standby.

9. Touch <Play> to begin recording.

When you touch the <Play> button, the metronome will play two measures (bars) of count-in before recording begins.

You can record repeatedly over the specified range of measures, adding additional notes at each pass.

10. Touch <Stop> to stop playback.

The indicator of the Rhythm track button which recorded the performance will light.

Count-In Recording

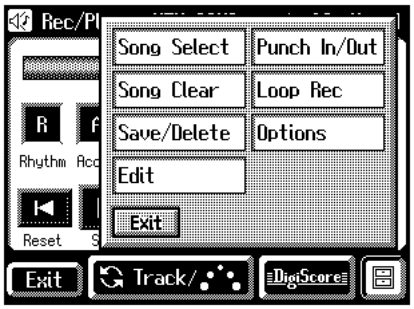
This setting (ON/OFF) determines whether or not a metronome count-in (2 measures) will be heard after pressing the [Play/Stop] button on recording.

1. Touch <Rec/Play> on the Main screen.

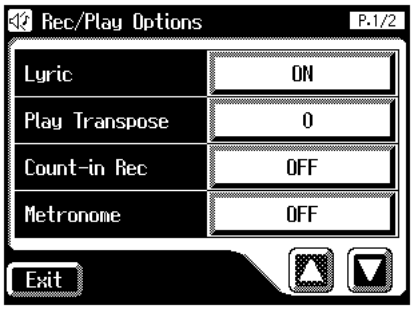
The Rec/Play screen appears.

2. Touch < > (Utility).

The Utility screen appears.



3. Touch <Options>.



4. Touch <><> to display the Count-In Rec.

5. Touch the Count-In Rec setting (ON/OFF) to switch it between "ON/OFF."

Each time you touch the Count-In Rec setting, it will alternate between ON/OFF.

Setting	Description
ON	A two-measure count will sound before recording
OFF	No count will sound before recording

6. Touch <Exit>.

Chapter 8 Editing Your Musical Performance Data

Song files that you record can be edited using five different functions.

The following editing functions are provided.

Menu	Descriptions	Page
Delete Measure	Deleting a Specific Measure.	p. 150
Delete Track	Delete the Recording from a Track.	p. 151
Erase Event	Erase Recording.	p. 153
Copy	Copying Measures.	p. 155
Quantize	Correct Timing Inaccuracies.	p. 156
Rename	Change the name of the performance data.	p. 141

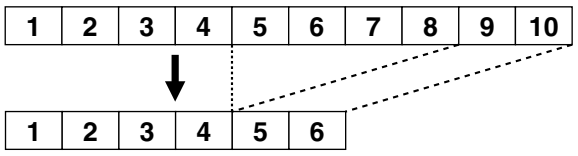
NOTE

Once you edit data, it cannot be restored to its original condition. As a precaution against accidents, we recommend that you save your song to a floppy disk before you edit it (p. 143).

Deleting a Specific Measure (Delete Measure)

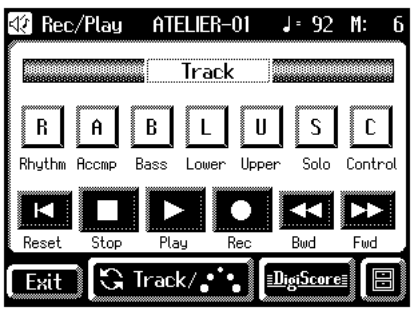
You can delete a portion of the performance data. This function lets you delete specified measures (bars) of the song from all tracks. When any part of the song file is deleted, subsequent recording will be moved forward to fill the gap.

Example: To delete measures (bars) 5–8

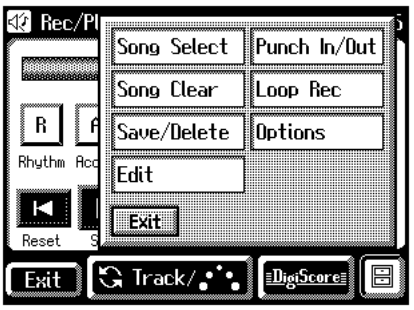


1. Touch <Rec/Play> on the Main screen.

The Rec/Play screen appears.

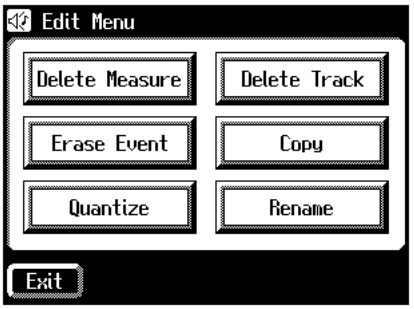


2. In the Rec/Play screen, touch <> (Utility) to open the Utility screen.

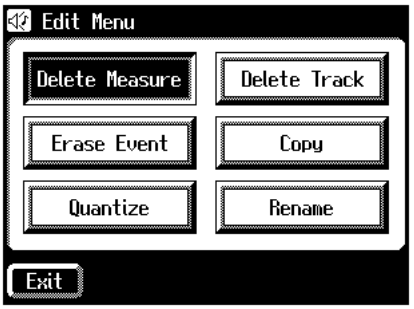


3. In the Utility screen, touch <Edit>.

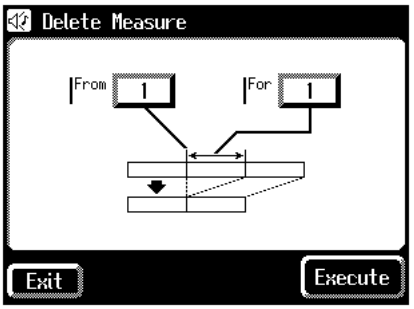
The Edit Menu screen appears.



4. Touch <Delete Measure>.

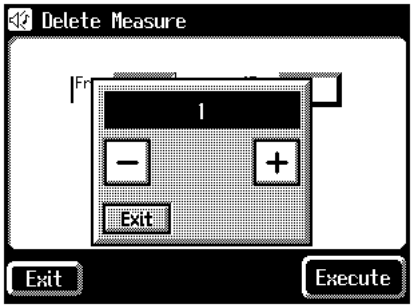


The Delete Measure screen appears.



5. Touch the "From" value (the first measure that you wish to delete).

6. **Touch <[−]><[+]> to set "From" (the first measure that you wish to delete).**



7. **When you're done making the settings, touch <Exit>.**

8. **Touch the "For" value (the number of measures that you wish to delete).**

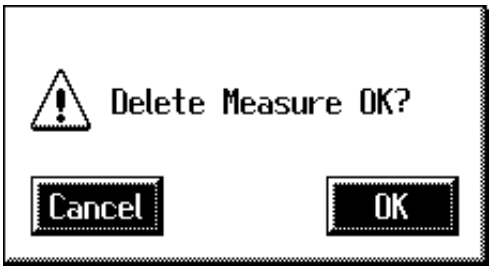
9. **Touch <[−]><[+]> to set "For" (the number of measures that you wish to delete).**

To delete to the last measure, select "ALL."

10. **When you're done making the settings, touch <Exit>.**

11. **Touch <Execute>.**

The following display appears.



To cancel operation, touch <Cancel>.

12. **Touch <OK> to delete the measures.**

When deletion has been completed, you are returned to the Delete Measure screen.

Delete the Recording from a Track (Delete Track)

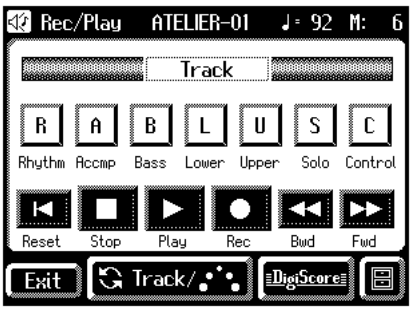
The AT-45 has seven tracks. This function lets you delete the recording from a track that you specify.

MEMO

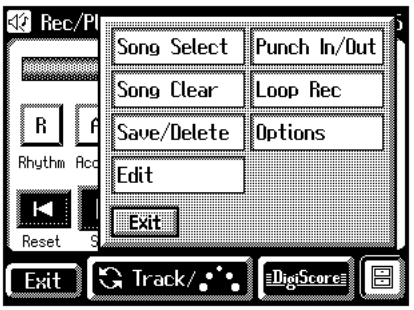
For more on the content stored on each track, refer to p. 129.

1. **Touch <Rec/Play> on the Main screen.**

The Rec/Play screen appears.

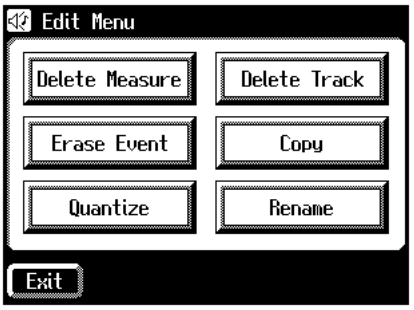


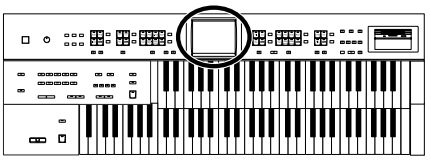
2. **In the Rec/Play screen, touch <[▤]> (Utility) to open the Utility screen.**



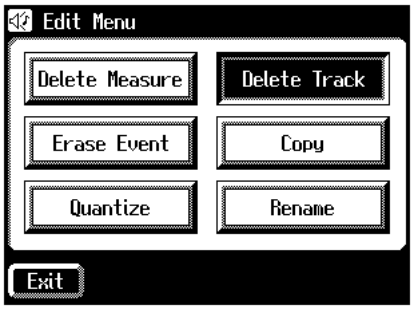
3. **In the Utility screen, touch <Edit>.**

The Edit Menu screen appears.

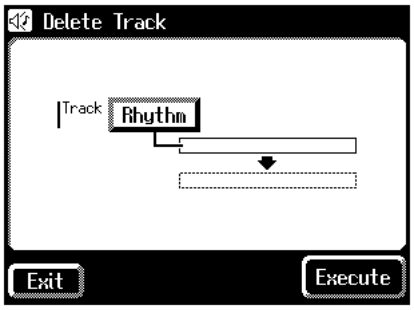




4. Touch <Delete Track>.

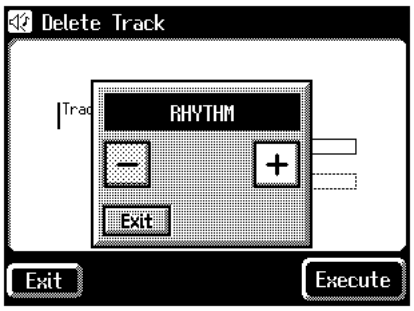


The Delete Track (delete the performance data of a track) screen appears.



5. Touch the "Track" value (the track whose performance data you wish to delete).

6. Touch <[−]><[+]> to select the "Track" (the track whose performance data you wish to delete).



Settings: **RHYTHM, ACCOMP, BASS, LOWER, UPPER, SOLO, CONTROL**

7. When you're done making the settings, touch <Exit>.

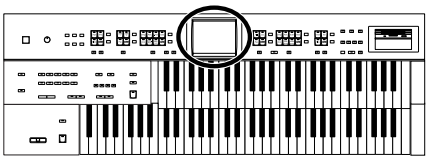
8. Touch <Execute>.

The following display appears.

To cancel operation, touch <Cancel>.

9. Touch <OK> to delete the performance data.

When the recording has been deleted, the Delete Track screen will reappear.



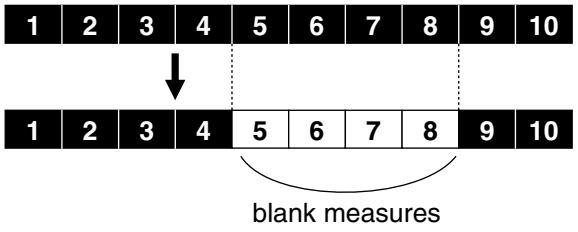
Deleting Data from Selected Measures (Erase Event)

You can erase a specified portion of the performance in a specified area without making the song shorter. This is called the "Erase" function.

As an alternative to the method of erasing all performance data in a specified area, you can erase the following contents of the performance.

ALL	All recording
NOTE	Notes played on the keyboard
PANEL	Panel operations Content Saved to the Control Track (Information Other than Expression, Voice, and Tempo Data) → Refer to (p. 129).
EXPRESSION	Expression pedal recording
VOICE	Voice settings
TEMPO	Tempo setting

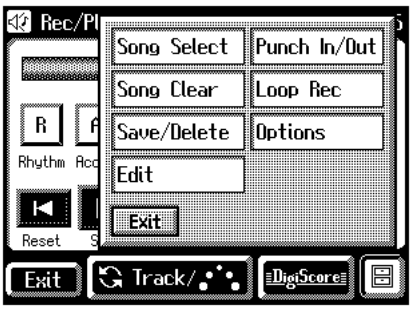
Example: Erasing measures (bars) 5–8



1. Touch <Rec/Play> on the Main screen.

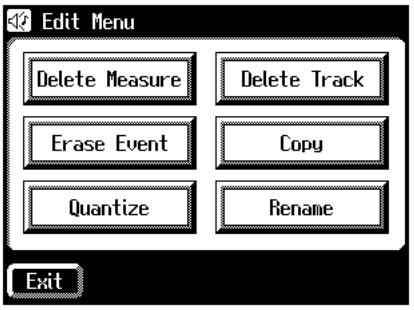
The Rec/Play screen appears.

2. In the Rec/Play screen, touch <> (Utility) to open the Utility screen.

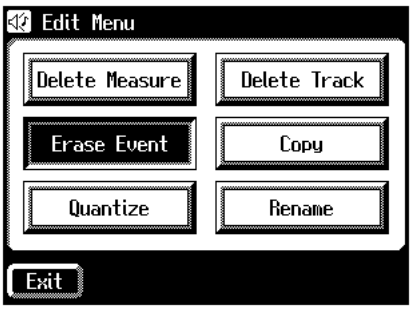


3. In the Utility screen, touch <Edit>.

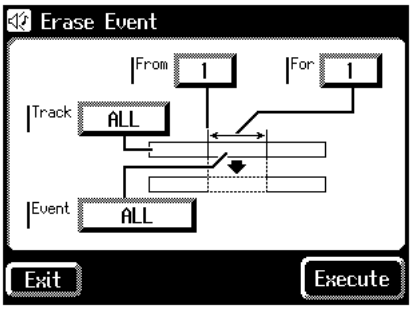
The Edit Menu screen appears.



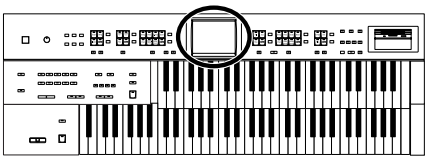
4. Touch <Erase Event>.



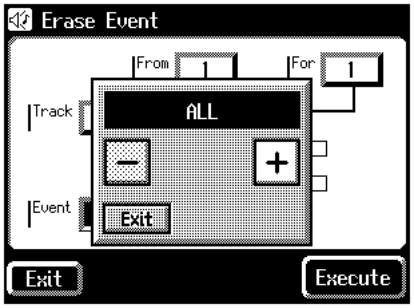
The Erase Event screen appears.



5. Touch the "Event" value (the type of performance data that you wish to erase).



6. Touch <−><+> to specify the "Event" (the type of performance data that you wish to erase).



Settings **ALL, NOTE, PANEL, EXPRESSION, VOICE, TEMPO**

7. When you're done making the settings, touch <Exit>.

8. Touch the "Track" value (the track from which data will be erased).

9. Touch <−><+> to specify the "Track" (the track from which data will be erased).

If you have selected EXPRESSION, VOICE and TEMPO as the type of recording to be erased, you need not specify the track.

Settings **ALL, RHYTHM, ACCOMP, BASS, LOWER, UPPER, SOLO, CONTROL**

If you select "ALL," the recording will be erased from all parts.

10. When you're done making the settings, touch <Exit>.

11. Touch the "From" value (the measure at which erasure will begin).

12. Touch <−><+> to set "From" (the measure at which erasure will begin).

13. When you're done making the settings, touch <Exit>.

14. Touch the "For" value (the number of measures from which the data will be erased).

15. Touch <−><+> to set "For" (the number of measures from which the data will be erased).

If you wish to erase to the last measure (bar), set "for: ALL."

16. When you're done making the settings, touch <Exit>.

17. Touch <Execute>.

The following display appears.

To cancel operation, touch <Cancel>.

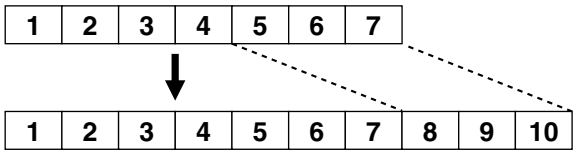
18. Touch <OK> to erase the performance data.

Once the performance data has been erased, you are returned to the Erase Event screen.

Copying Measures (Copy)

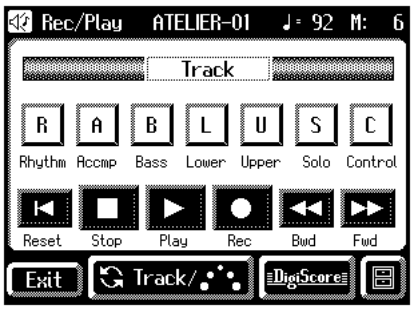
This function lets you copy a portion of recorded song to a different measure (bar) location in the same track.
If a recording already exists at the copy destination, it will be erased.

Example: To copy measures (bars) 5–7 to measure (bar) 8

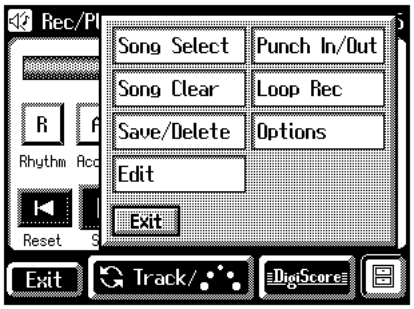


1. Touch <Rec/Play> on the Main screen.

The Rec/Play screen appears.

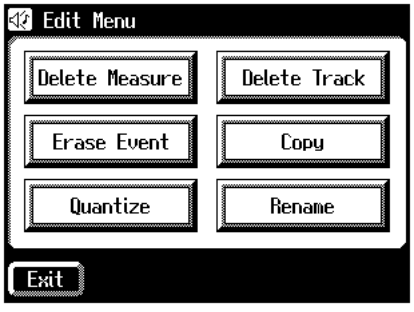


2. In the Rec/Play screen, touch <[▤]> (Utility) to open the Utility screen.

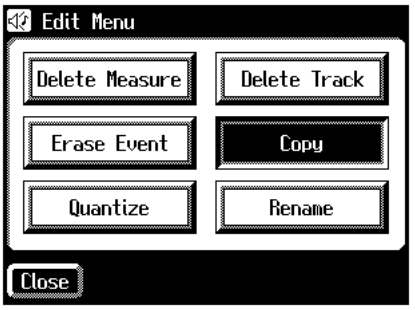


3. In the Utility screen, touch <Edit>.

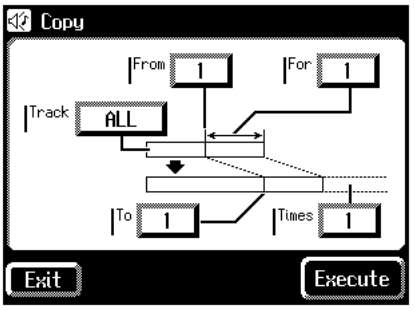
The Edit Menu screen appears.



4. Touch <Copy>.

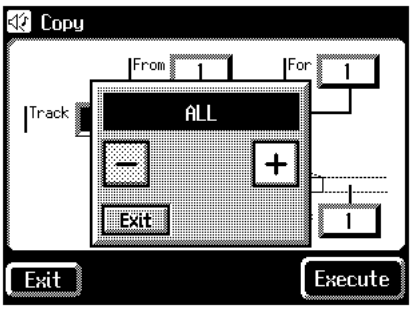


The Copy screen appears.



5. Touch the "Track" value (the track to be copied).

6. Touch <[−]><[+]> to set "Track" (the track to be copied).

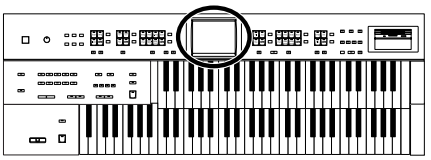


Settings: **ALL, RHYTHM, ACCOMP, BASS, LOWER, UPPER, SOLO, CONTROL**

If you select "ALL," the recording in all the tracks will be copied.

7. When you're done making the settings, touch <Exit>.

8. Touch the "From" value (the measure at which copying will begin).



9. **Touch <[−]><[+]> to set "From" (the measure at which copying will begin).**

10. **When you're done making the settings, touch <Exit>.**

11. **Touch the "For" value (the number of measures to be copied).**

12. **Touch <[−]><[+]> to set "For" (the number of measures to be copied).**

If you want to specify all of the data up to the final measure, select "ALL."

13. **When you're done making the settings, touch <Exit>.**

14. **Touch the "To" value (the copy-destination measure number).**

15. **Touch <[−]><[+]> to set "To" (the copy-destination measure number).**

If you select "END," the data will be copied following the end of the last measure.

16. **When you're done making the settings, touch <Exit>.**

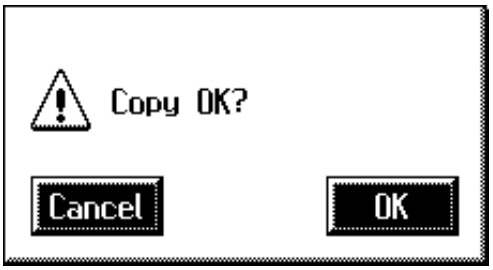
17. **Touch the "Time" value (the number of times that the data will be copied).**

18. **Touch <[−]><[+]> to set "Time" (the number of times that the data will be copied).**

19. **When you're done making the settings, touch <Exit>.**

20. **Touch <Execute>.**

The following display appears.



To cancel operation, touch <Cancel>.

21. **Touch <OK> to copy the measures.**

Once the measures have been copied, you are returned to the Copy screen.

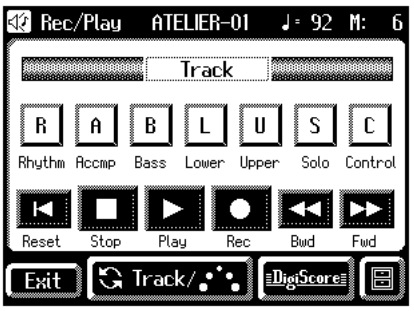
Correct Timing Inaccuracies (Quantize)

You can correct for timing discrepancies in a recorded performance by having the music be aligned with a timing you specify. This is called "Quantizing."

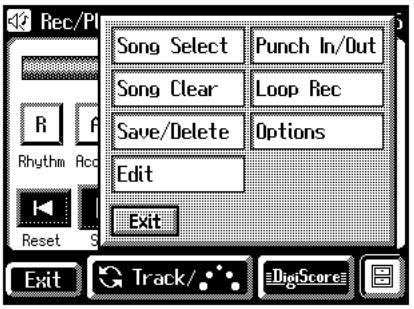
For example even if you intend to play at quarter-note timing, the notes may be slightly earlier or later than precise quarter-note intervals. In this case, if you quantize at quarter-note (1/4) timing, you can correctly match the rhythms.

1. **Touch <Rec/Play> on the Main screen.**

The Rec/Play screen appears.

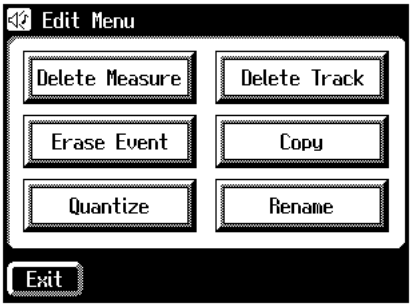


2. **In the Rec/Play screen, touch <[▤]> (Utility) to open the Utility screen.**

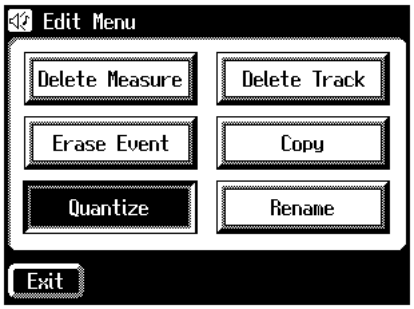


3. **In the Utility screen, touch <Edit>.**

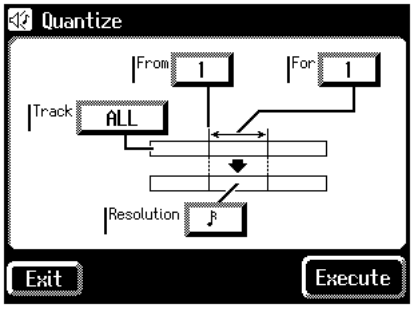
The Edit Menu screen appears.



4. Touch <Quantize>.

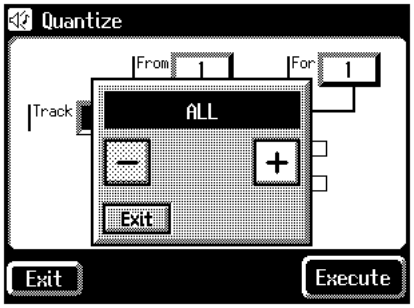


The Quantize screen appears.



5. Touch the "Track" value (the track that will be quantized).

6. Touch <[−]><[+]> to specify the "Track" (the track that will be quantized).



Settings **ALL, RHYTHM, ACCOMP, BASS, LOWER, UPPER, SOLO**

If you select "ALL," the recording in all the tracks will be quantized.

7. When you're done making the settings, touch <Exit>.

8. Touch the "From" value (the measure at which quantization will begin).

9. Touch <[−]><[+]> to set "From" (the measure at which quantization will begin).

10. When you're done making the settings, touch <Exit>.

11. Touch the "For" value (the number of measures that will be quantized).

12. Touch <[−]><[+]> to set "For" (the number of measures that will be quantized).

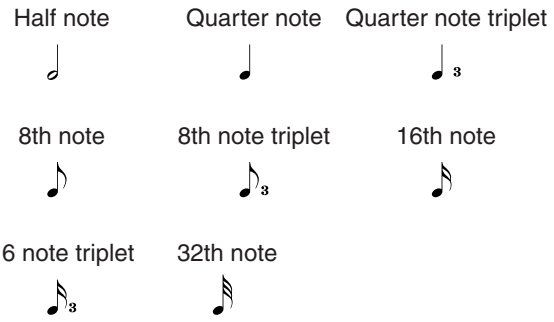
To specify everything through to the last measure, set "for: ALL."

13. When you're done making the settings, touch <Exit>.

14. Touch the "Resolution" value (the resolution at which notes will be aligned).

15. Touch the settings to select "Resolution" (the resolution at which notes will be aligned).

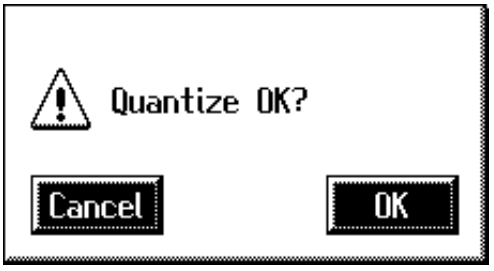
The "Resolution" (the timing to which notes are aligned) can be set to one of the following settings.



16. When you're done making the settings, touch <Exit>.

17. Touch <Execute>.

The following display appears.



To cancel operation, touch <Cancel>.

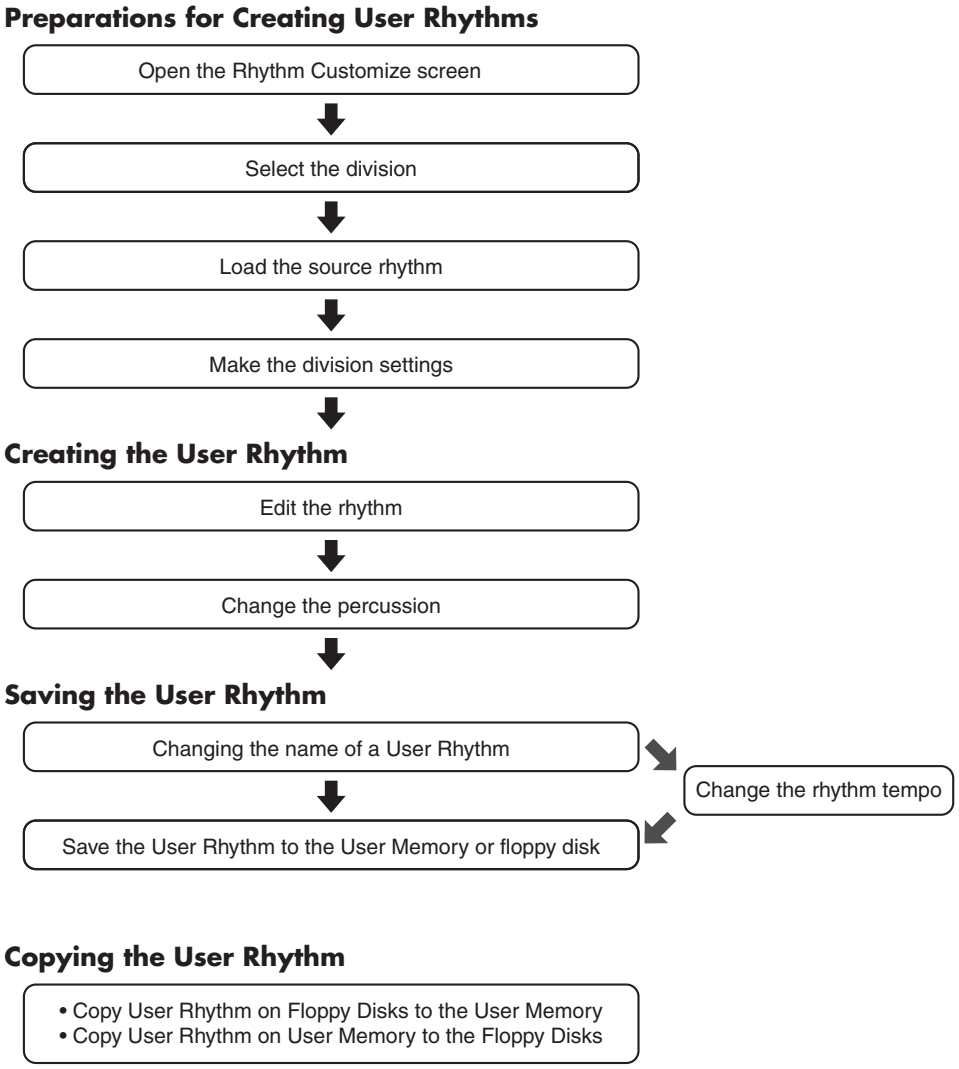
18. Touch <OK> to have the quantization carried out.

When the quantizing is finished, you are returned to the Quantize screen.

Chapter 9 Creating Original Accompaniment Rhythms

You can edit some of the internal rhythms to create your own original rhythms. These original rhythms are called "User Rhythms." This function is called "Rhythm Customize."

Process for Creating User Rhythms



Preparations for Creating User Rhythms

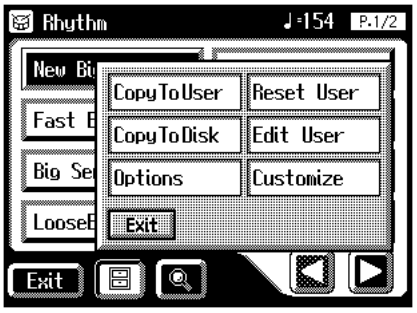
■ Displaying the Rhythm Customize Screen

1. Touch <Rhythm> on the Main screen.

The Rhythm screen appears.

2. In the Rhythm screen, touch < > (Utility).

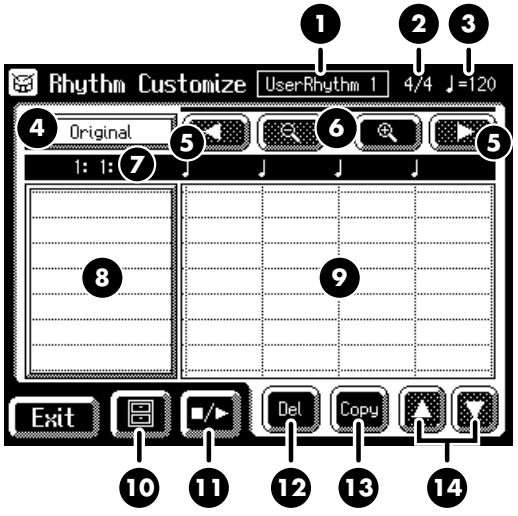
The Utility screen appears.



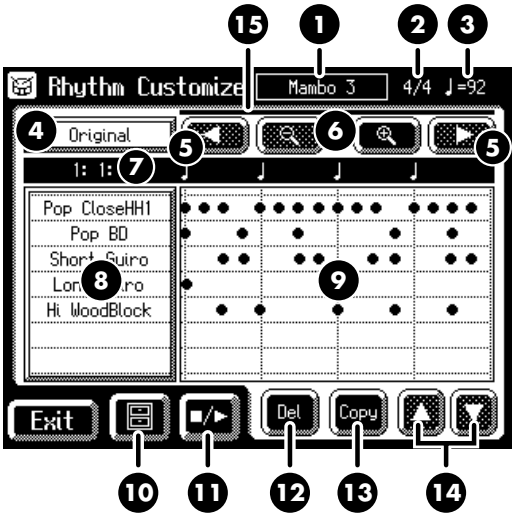
3. Touch <Customize>.

The Rhythm Customize screen appears.

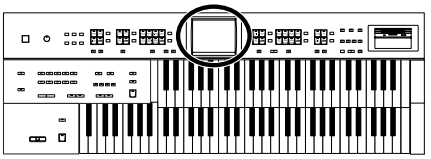
When opening a new Rhythm Customize screen



When calling up a source



1	**Rhythm Name**
2	**Beat**
3	**Tempo**
4	**Division Name (p. 160)**
5	**button** Switches the page when the rhythm pattern is displayed over multiple pages.
6	**(Zoom Out/Zoom In) button** Expands (zooms in) and reduces (zooms out) the rhythm pattern display.
7	**Current location (Measure: Beat: Tick)**
8	**Instrument Name** Indicates the name of the instrument used in the rhythm.
9	**Rhythm Pattern Display** Displays the notes in the selected rhythm pattern.
10	**(Utility) button** Displays the menu with settings for the Rhythm Customize function.
11	**(Preview) button** Allows you to listen to the created rhythm.
12	**(Delete) button** Deletes the rhythm in the displayed measure.
13	**(Copy) button** Copies the rhythm in the displayed measure and adds it to the end of that measure.
14	**button** When more than eight different instruments are used in a rhythm, press these buttons to switch through the instrument names.
15	**Scroll Bar** This indicates the position of the current measure in the overall rhythm.



■ Selecting the Division

What is the Division?

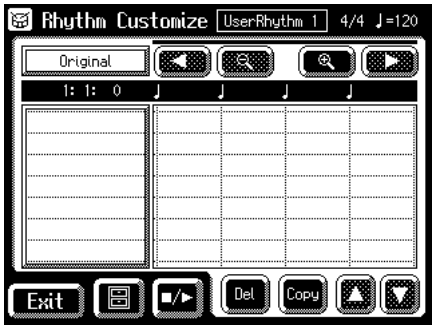
A song progresses in predictable a sequence, such as intro, melody A, melody B, bridge and ending.

With the AT-45, such changes in songs are allocated to the following six performance states. We call these six parts of a song "Divisions."

Division	Performance division
Intro	The intro is played at the start of a song.
Original	This is a basic accompaniment pattern.
Fill In To Variation	This is a phrase inserted at a juncture where the mood changes. It is used to make a song more lively. After the phrase is played, the variation's accompaniment pattern is played.
Variation	This is a developmental accompaniment pattern. It is a variation on an Original.
Fill In To Original	This is a phrase inserted at a juncture where the mood changes. It is used to make a song more sedate. After the phrase is played, the original's accompaniment pattern is played.
Ending	This is played at the end of a song.

You can make a song more lively or more restrained by increasing or reducing played parts by Divisions. You can also modify a song by changing the voice of the parts in the Divisions.

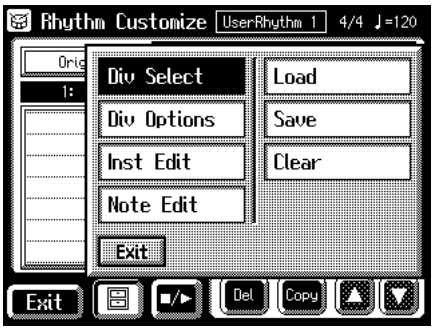
1. Bring up the Rhythm Customize screen (p. 159).



2. Touch < > (Utility).

The Utility screen appears.

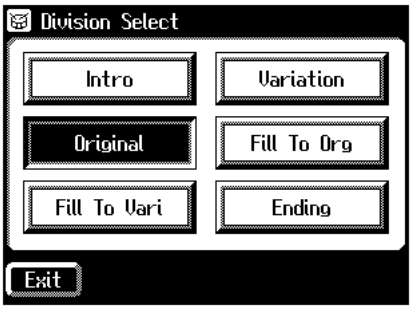
3. Touch <Div Select> (Division Select).



MEMO

You can open the Division Select screen by touching the Division name indication (p. 159) in the Rhythm Customize screen.

4. Touch a Division name to select the Division.



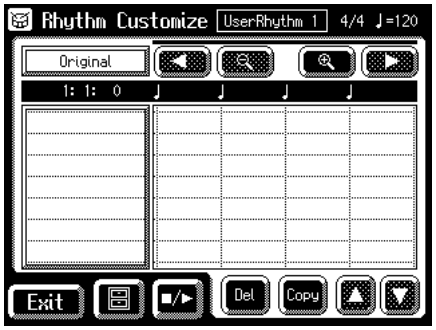
This returns you to the Rhythm Customize screen. The name of the selected division now appears in the Rhythm Customize screen.

You can touch < > to hear how the rhythm sounds.

■ Loading the Rhythm

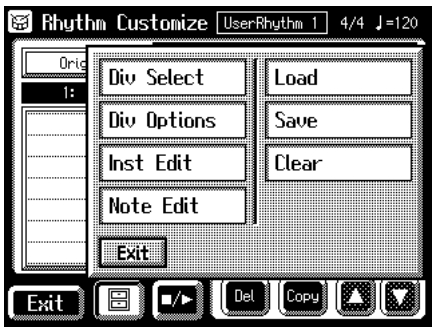
Use the Rhythm Customize function to select the rhythm you want to use as the base for the rhythm you are creating.

1. Bring up the Rhythm Customize screen (p. 159).



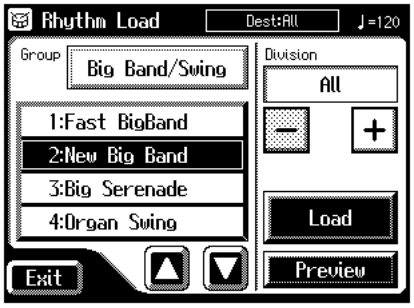
2. Touch <[▣]> (Utility).

The Utility screen appears.



3. Touch <Load>.

The Rhythm Load screen appears.

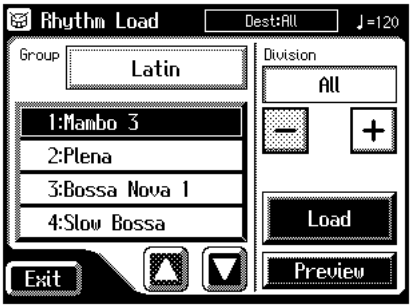


4. Touch a Rhythm group name.

The sub-window for selecting the rhythm group appears.

5. Touch a Rhythm group name on the sub-window to select the Rhythm group.

The Rhythm Load screen reappears.



6. Touch <[▲]><[▼]> to switch the screen, then touch a rhythm name to select the rhythm.

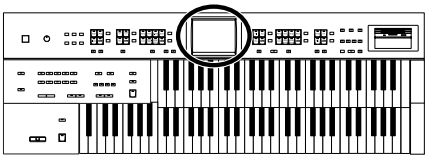
You can touch <Preview> to hear how the rhythm sounds.

7. Touch<[−]><[+]> to select the Division you want to call up.

Selecting "ALL" calls up all of the Divisions.

8. Touch <Load>.

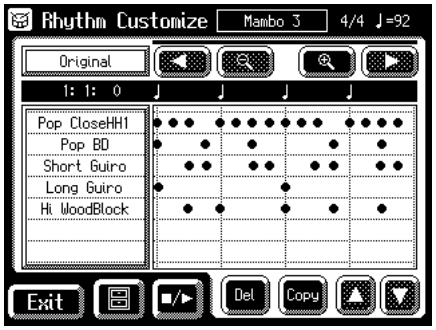
The rhythm is called up, and the Rhythm Customize screen returns to the display.



■ Making the Division Settings

Independent "Drum Set," "Beat," and "Volume" settings can be made for each Division.

1. Bring up the Rhythm Customize screen (p. 159).

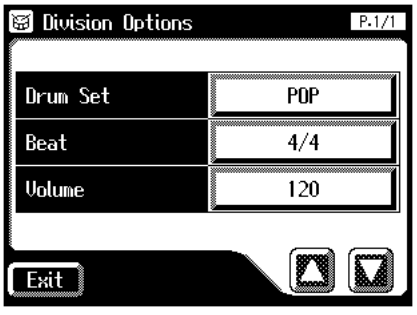


2. Touch <[▣]> (Utility).

The Utility screen appears.

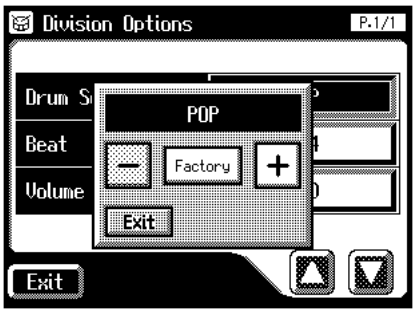
3. Touch <Div Options> (Division Options).

The Division Options screen appears.



Changing the Drum Set

4. Touch the value set for Drum Set.



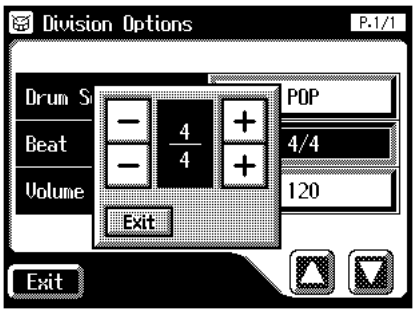
5. Touch <[−]><[+]> to change the setting.

6. Touch <Exit>.

The Division Options screen reappears.

Changing the Beat

7. Touch the Beat setting.



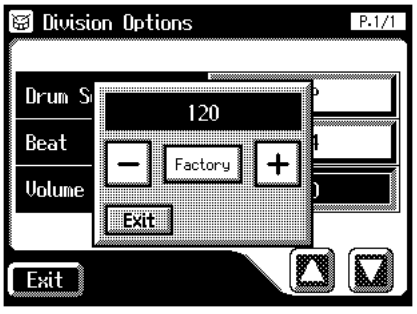
8. Touch <[−]><[+]> to change the setting.

9. Touch <Exit>.

The Division Options screen reappears.

Changing the Volume

10. Touch the Volume setting.



11. Touch <[−]><[+]> to change the setting.

12. **Touch <Exit>.**

The Division Options screen reappears.

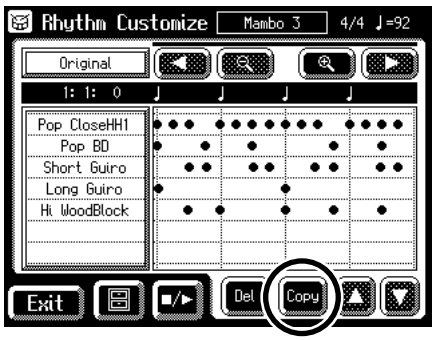
■ Editing the Rhythm

Edit the internal rhythm.

What you can do	Page
Copying the Rhythm in a Selected Measure	p. 163
Deleting the Rhythm in a Selected Measure	p. 163
Erasing Sounds	p. 164
Adding Sounds	p. 164
Altering Voices	p. 165
Changing the Velocity	p. 165
Moving Sounds	p. 165

Copying the Rhythm in a Selected Measure

1. **Bring up the Rhythm Customize screen (p. 159).**



2. **Touch <Copy> (to copy the selected measure).**

The following screen appears.

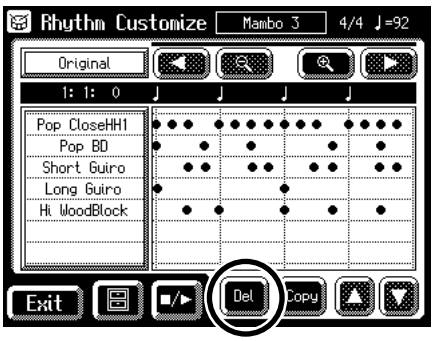
To cancel operation, touch <Cancel>.

3. **Touch <OK>.**

Copies the rhythm in the displayed measure and adds it to the end of that measure.

Deleting the Rhythm in a Selected Measure

1. **Bring up the Rhythm Customize screen (p. 159).**



2. **Touch <Del> (to copy the selected measure).**

The following screen appears.

To cancel operation, touch <Cancel>.

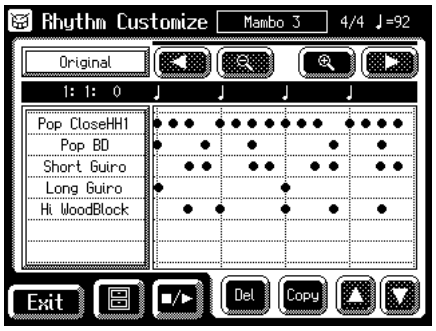
3. **Touch <OK>.**

The selected measure is deleted.

Editing the Sounds

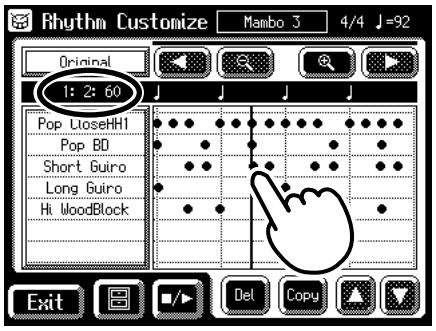
You can add and erase sounds, alter voices, and change the velocity.

1. Bring up the Rhythm Customize screen (p. 159).



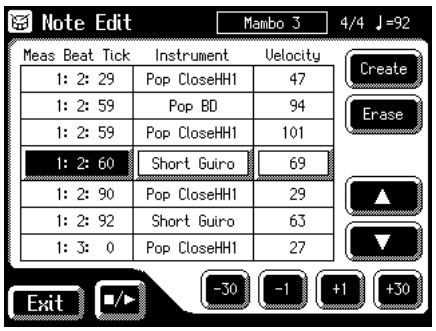
2. Touch the point on the screen where the sound you want to edit is located.

When you touch the screen, a line appears at the point you touch. By holding your finger to the screen and moving it to the left or right, you can have the line move along with your finger.



The information on the location (Measure: Beat: Tick) of the line on the screen is displayed.

When you remove your finger from the screen, the Note Edit screen opens, and the note positioned at the line in the Rhythm Customize screen is displayed.

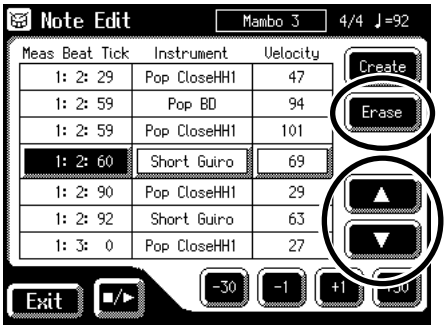


MEMO

You can touch < > to open the Utility screen, and then touch <Note Edit> in the Utility screen to open the Note Edit screen.

Erasing Sounds

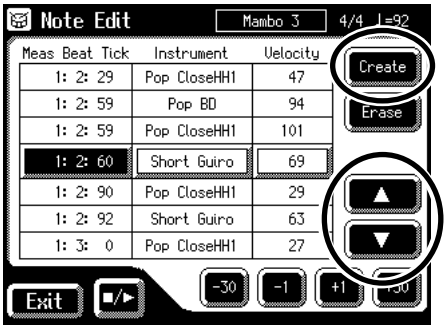
3. Touch < ▲ >< ▼ > to select the point where you want to delete the sound.



4. When you touch <Erase>, the selected sound is erased.

Adding Sounds

5. Touch < ▲ >< ▼ > to select the point where you want to add the sound.

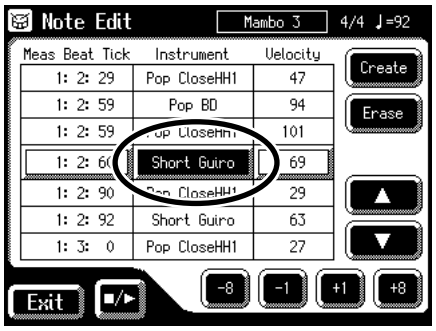


6. When you touch <Create>, the new sound is added after the selected sound.

Altering Voices

7. **Touch < ▲ >< ▼ > to select the sound whose voice you want to change.**

8. **Touch the Instrument name.**

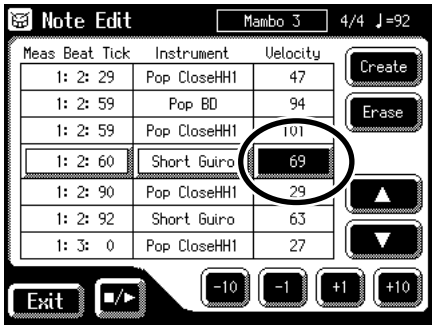


9. **Touch <-8><-1><+1><+8> to switch the voice.**

Changing the Velocity

10. **Touch < ▲ >< ▼ > to select the sound whose velocity you want to change.**

11. **Touch the Velocity setting.**



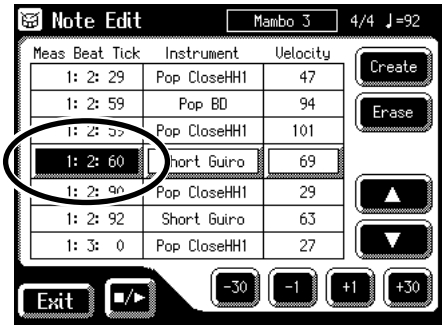
12. **Touch <-10><-1><+1><+10> to change the velocity.**

Moving Sounds

13. **Touch < ▲ >< ▼ > to select the sound you want to move.**

14. **Touch the "Meas Beat Tick" setting.**

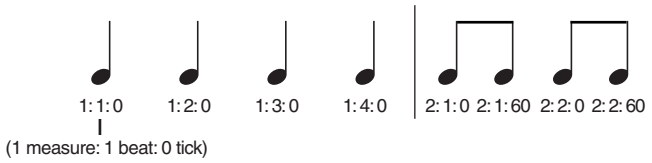
The note-location display uses "Measure: Beat: Tick" as the format. A tick is a unit of time that's shorter than a beat.



15. **Touch <-10><-1><+1><+10> to move the sound.**

With the Rhythm Customize function, note locations are expressed in terms of "Measure: Beat: Tick." One tick is the smallest unit used in indicating the location of the note, and there are 120 ticks in a quarter note. Typical notes might be indicated as shown below.

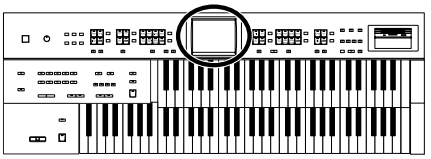
Quarter Note **8th Note**



8th Note Triplet **16th Note**

The ticks for each note have the following characteristics.

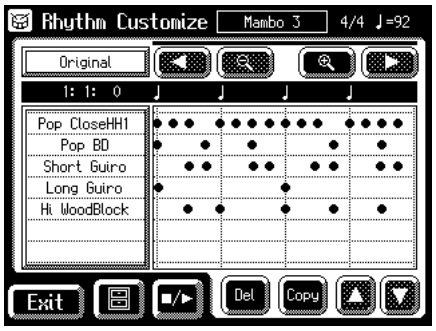
Quarter Note	0 (Every 120 ticks)
8th Note	0, 60 (Every 60 ticks)
8th Note Triplet	0, 40, 80 (Every 40 ticks)
16the Note	0, 30, 60, 90 (Every 30 ticks)



■ Changing and Deleting the Instruments Used

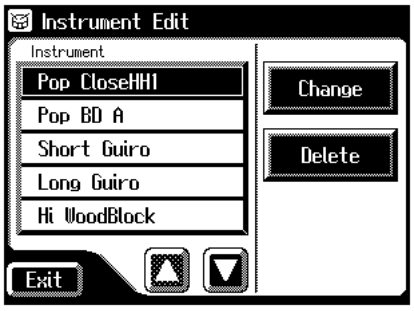
You can change an instrument used in a rhythm and replace it with another instrument.

1. Bring up the Rhythm Customize screen (p. 159).



2. Touch the section in the Rhythm Customize screen where the instrument names are displayed.

The Instrument Edit screen appears.



MEMO

You can open Instrument Edit screen using the following procedure.

1. Touch <> (Utility) in the Rhythm Customize screen (p. 159).

The Utility screen appears.

2. Touch <Inst Edit> (Instrument Edit).

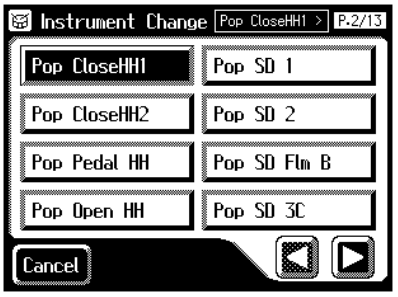
The Instrument Edit screen appears.

Changing the Instrument Used

3. Touch <><> in the screen to select the name of the instrument you want to change.

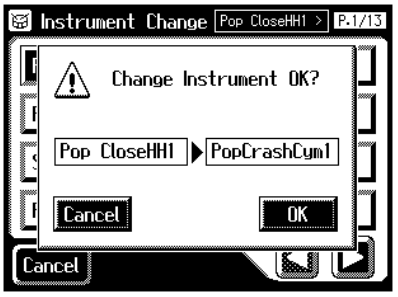
4. Touch <Change>.

The following screen appears.



5. Touch <><> to switch the screen, then touch the instrument name.

The following screen appears.



To cancel operation, touch <Cancel>.

6. If you want to change the instrument, touch <OK>.

The instrument is changed.

Deleting an Instrument

You can delete an instrument used in a rhythm. When an instrument is deleted, all of the sounds using that instrument are deleted from the rhythm.

7. Touch <><> in the screen to select the name of the instrument you want to delete.

8. Touch <Delete> on the Instrument Edit screen.

9. If you are sure that you wish to delete the instrument, touch <OK>.

The selected instrument is deleted.

■ Deleting Rhythms You Have Created

This deletes User rhythms created by partially editing the internal rhythms.

1. Bring up the Rhythm Customize screen (p. 159).

2. Touch < > (Utility).

The Utility screen appears.

3. Touch <Clear>.

The following screen appears.

To cancel operation, touch <Cancel>.

4. If you are sure that you wish to delete the rhythm, touch <OK>.

■ Changing the Name of a User Rhythm (Rename)

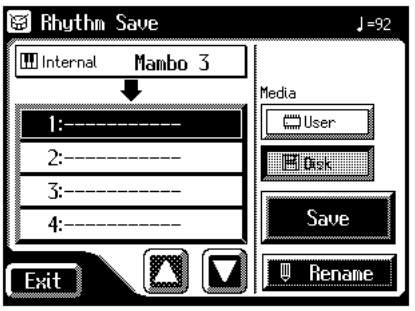
1. Bring up the Rhythm Customize screen (p. 159).

2. Touch < > (Utility).

The Utility screen appears.

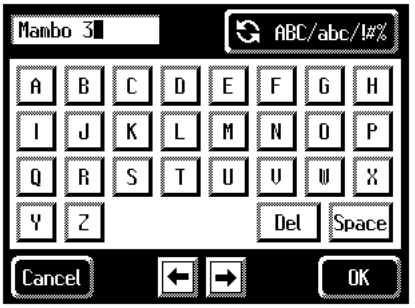
3. Touch <Save>.

The Rhythm Save screen appears.



4. Touch <Rename>.

The Rename screen appears.



5. Touch the character select button (ABC/abc/!#%)to switch among uppercase/lowercase/symbols.

Touch the character select button repeatedly to cycle through the available choices, like this: uppercase → lowercase → symbols → uppercase...

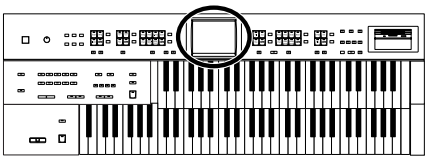
6. Touch the screen to specify the desired character.

The following characters can be selected.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z	
a b c d e f g h i j k l m n o p q r s t u v w x y z	
! " # % & ' ( ) * + , - . / : = ? ^ _ 0 1 2 3 4 5 6 7 8 9	
Del	Deletes a character.
Space	Inserts a space (blank).
← →	Move the cursor (the symbol that indicates the location at which characters will be input) to left or right.

To cancel operation, touch <Cancel>.

7. When you're done making the settings, touch <OK>.



Saving User Rhythms to the User Memory or Floppy Disks

You can take User rhythms created with the Rhythm Customize function and save them in the AT-45's User memory and floppy disks. To call up rhythms saved in User memory, press the [Disk/User] button.

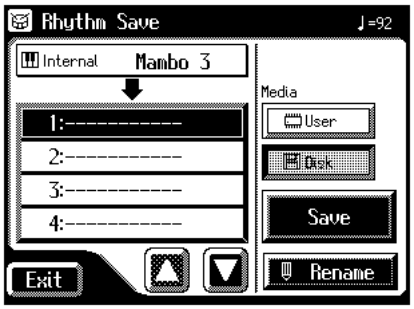
1. Bring up the Rhythm Customize screen (p. 159).

2. Touch <[▤]> (Utility).

The Utility screen appears.

3. Touch <Save>.

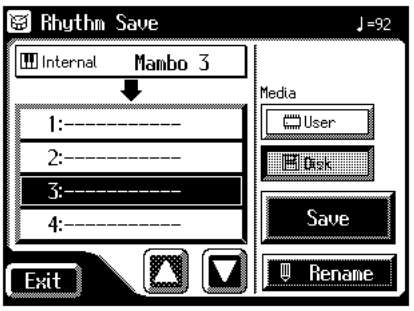
The Rhythm Save screen appears.



4. Touch <Disk> (floppy disk) or <User> (User memory) to determine the save destination.

5. Touch <▲><▼> to select the number of the save destination.

Numbers which have not been used in the saving operation will be displayed as "- - - - -."



To cancel the save, touch the <Exit> to close the Rhythm Save screen.

You can change the name of a rhythm by touching <Rename>.

6. Touch <Save>.

The User rhythms are saved to the User memory or to floppy disks.

MEMO

You can save rhythms after changing the tempo by pressing the Tempo [◄] [►] button.

If the following screen appears

The following screen appears if you select a number to which a rhythm has already been saved and then touch <Save>.

If you wish to overwrite the rhythm

1. Touch <OK>.

The Rhythm will be rewritten.

If you wish to save new data instead of updating the rhythm

1. Touch <Cancel>.

Rewriting of the Rhythm will be canceled.

2. In the Rhythm Save screen, select the number that is displayed as "-----" (a number that currently does not contain rhythm data).

3. Save the Rhythm.

Chapter 10 Various Other Settings

Adjusting How the Instrument Responds

■ Adjusting the Initial Touch Sensitivity

Initial Touch is a function that translates the force used in playing the keys into a directly proportional amount of volume. This adjusts the amount of the Initial Touch effect applied.

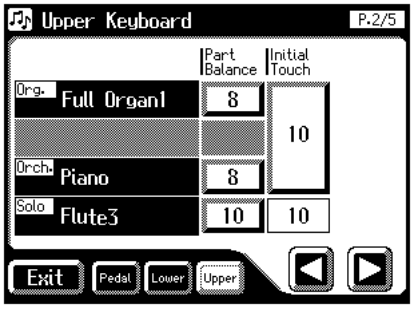
1. Touch <Sound/Kbd> on the Main screen.

The Sound/Keyboard screen appears.

2. Touch either <UPPER>, or <LOWER>.

UPPER	To change the initial touch setting of the Upper part
LOWER	To change the initial touch setting of the Lower part

3. Touch <◀><▶> to display the Initial Touch.



4. Touch the Initial Touch value (OFF, 1–10).

5. Touch <−><+> to change the setting.

Setting **OFF, 1–10**

Setting	Descriptions
1–10	Initial Touch is on. The harder you play the key, the higher the volume. The change in volume when the keys are played forcefully increases as the value is increased.
OFF	Initial Touch is off. Volume remains constant regardless of how hard you play.

6. Touch <Exit>.

■ Changing the Pedalboard Polyphony

You can set the Bass Pedalboard to play simultaneous multiple notes or single notes only.

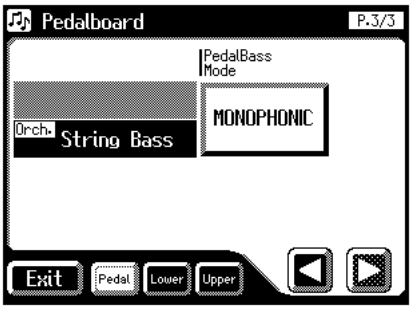
1. Touch <Sound/Kbd> on the Main screen.

The Sound/Keyboard screen appears.

2. Touch <PEDAL>.

The Pedalboard screen appears.

3. Touch <◀><▶> to display the PedalBass Mode.

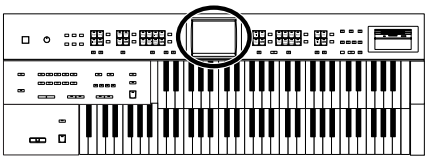


4. Touch the PedalBass Mode setting to switch between "MONOPHONIC" and "POLYPHONIC."

Each time you touch the PedalBass Mode setting, it will alternate between "MONOPHONIC" and "POLYPHONIC."

Setting	Descriptions
MONOPHONIC	Only single notes can be played.
POLYPHONIC	Multiple notes can be played.

5. Touch <Exit>.



Performance Function Settings

■ Selecting the Range of Keys to Which the Damper Pedal will Apply

You can specify which keyboard will be affected when you press the Damper (Sustain) pedal.

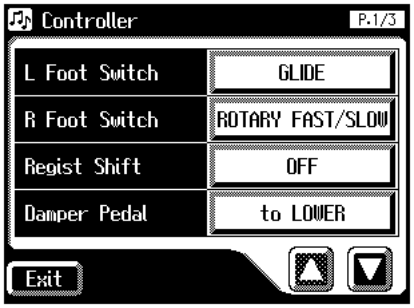
1. Touch <Sound/Kbd> on the Main screen.

The Sound/Keyboard screen appears.

2. Touch <Controller>.

The Controller screen appears.

3. Touch <▲><▼> to display the Damper Pedal.



4. Touch the Damper Pedal setting to switch between "to UPPER" and "to LOWER."

Each time you touch the Damper Pedal setting, it will alternate between "to UPPER" and "to LOWER."

Setting	Descriptions
to UPPER	The effect is applied to the voices played on the Upper keyboard.
to LOWER	The effect is applied to the voices played on the Lower keyboard.

5. Touch <Exit>.

NOTE

If the voice is a percussive voice (such as a Piano voice), the tone will be sustained, but fade away just like an acoustic piano. If the voice is a non-percussive instrument (such as a String voice), the tone will be sustained as long as the pedal is depressed.

■ Changing the Function of the Expression Pedal

Specify how the Expression Pedal will function when your performance is being recorded and when ATELIER song data are being played back.

Function During Recording

Specify whether Expression Pedal operations will be recorded or not while your performance is being recorded.

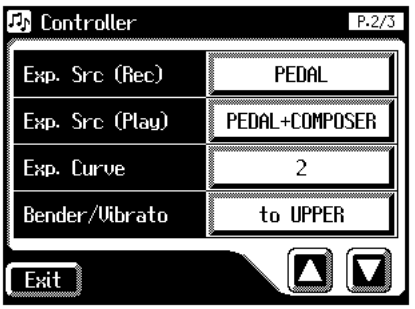
1. Touch <Sound/Kbd> on the Main screen.

The Sound/Keyboard screen appears.

2. Touch <Controller>.

The Controller screen appears.

3. Touch <▲><▼> to display the Exp. Src (Rec).

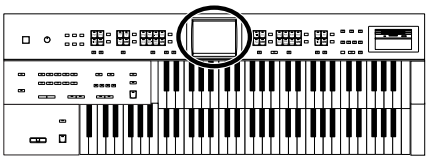


4. Touch the Exp. Src (Rec) setting to switch between "PEDAL" and "COMPOSER."

Each time you touch the Exp.Src (Rec) setting, it will alternate between "PEDAL" and "COMPOSER."

Setting	Descriptions
PEDAL	Expression Pedal movements will be recorded. The previous recording will be erased as new songs are recorded.
COMPOSER	Expression Pedal movements will not be recorded. The previous data will remain without being erased.

5. Touch <Exit>.



Function During Playback

You can specify whether or not the Expression Pedal will function while ATELIER song files are being played back.

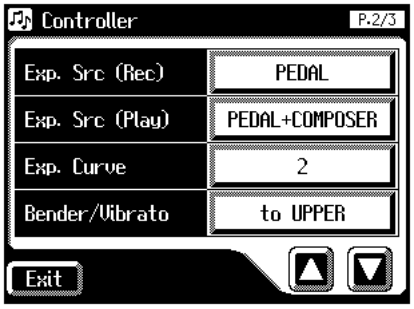
1. Touch <Sound/Kbd> on the Main screen.

The Sound/Keyboard screen appears.

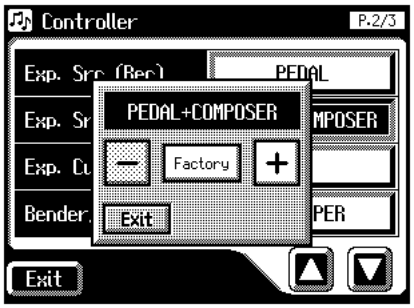
2. Touch <Controller>.

The Controller screen appears.

3. Touch <▲><▼> to display the Exp. Src (Play).



4. Touch the Exp. Src (Play) setting.



5. Touch <−><+> to change the setting.

Setting	Descriptions
PEDAL +COMPOSER	The Expression Pedal will function. Expression Pedal recording within the song data will also be effective.
COMPOSER	The Expression Pedal will not function. The Expression Pedal recording within the song data will be effective.
PEDAL	The Expression Pedal will function. The Expression Pedal recording within the song data will be ignored.

6. Touch <Exit>.

■ Selecting the Keyboard to Which the Pitch Bend/Vibrato Lever will Apply

This setting determines which keyboard will be controlled by the Pitch Bend/Vibrato lever.

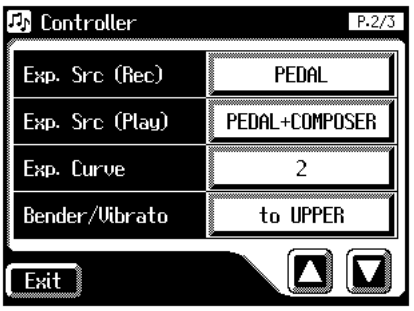
1. Touch <Sound/Kbd> on the Main screen.

The Sound/Keyboard screen appears.

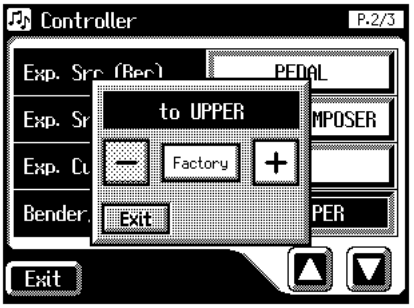
2. Touch <Controller>.

The Controller screen appears.

3. Touch <▲><▼> to display the Bender/Vibrato.



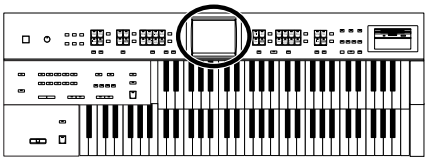
4. Touch the Bender/Vibrato setting.



5. Touch <−><+> to change the setting.

Setting	Descriptions
to UPPER	The effect is applied to the voices played on the Upper keyboard.
to LOWER	The effect is applied to the voices played on the Lower keyboard.
to PEDAL	The effect is applied to the voices played on the Pedalboard.

6. Touch <Exit>.



■ Changing the Pitch Bend Range

This setting allows you to choose the maximum amount of Pitch change (range) permissible when using Pitch Bend. The range can be set anywhere between 1–12 (in semitone units; with a maximum of one octave).

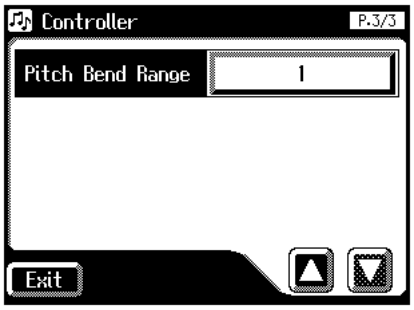
1. Touch <Sound/Kbd> on the Main screen.

The Sound/Keyboard screen appears.

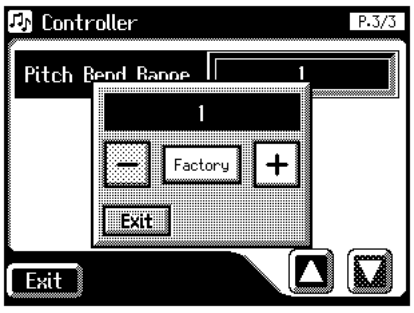
2. Touch <Controller>.

The Controller screen appears.

3. Touch <▲><▼> to display the Pitch Bend Range.



4. Touch the Pitch Bend Range setting.



5. Touch <−><+> to change the setting.

Settings **1–12 (semitone steps)**

6. Touch <Exit>.

NOTE

Drums/SFX is fixed at one octave range, regardless of this setting.

Rhythm Settings

■ Turning Chord Hold On/Off

The Chord Hold function can be switched ON/OFF. When Chord Hold is ON, the Automatic Accompaniment will continue playing even when you lift your hand from the keyboard to play a new chord.

1. Touch <Rhythm> on the Main screen.

The Rhythm screen appears.

2. In the Rhythm screen, touch < > (Utility).

The Utility screen appears.

3. Touch <Options>.

The Rhythm Option screen appears.

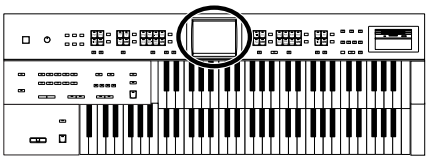
4. Touch <▲><▼> to display the Chord Hold.

5. Touch the Chord Hold setting to switch between "ON" and "OFF."

Each time you touch the Chord Hold setting, it will alternate between "ON" and "OFF."

Setting	Descriptions
ON	The Automatic Accompaniment determined by the chord played on the Lower keyboard is held (even if you release the keys).
OFF	When you release the keys that you played in the Lower keyboard, the Automatic Accompaniment will stop (be muted). Only the Rhythm (drum) performance will continue.

6. Touch <Exit>.



■ Count Down Sound

You can change the sound that is used for the count played at the end of the intro with the Intro Countdown function (p. 58).

1. Touch <Rhythm> on the Main screen.

The Rhythm screen appears.

2. In the Rhythm screen, touch < > (Utility).

The Utility screen appears.

3. Touch <Options>.

The Rhythm Option screen appears.

4. Touch <><> to display the Count Down Sound.

5. Touch the Count Down Sound setting to switch between "VOICE" and "STICK."

Each time you touch the Count Down Sound setting, it will alternate between "VOICE" and "STICK."

Setting	Descriptions
VOICE	Human voice count (One, two, three...)
STICK	Stick sound count

6. Touch <Exit>.

■ Preventing Rhythm Tempos from Switching Automatically

You can prevent rhythm tempos from switching automatically when you switch rhythms.

1. Touch <Rhythm> on the Main screen.

The Rhythm screen appears.

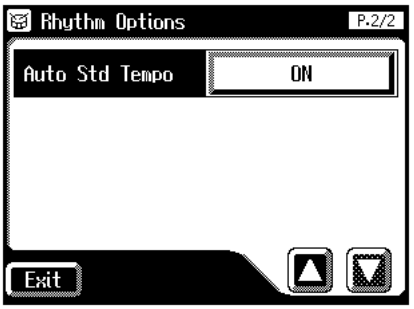
2. In the Rhythm screen, touch < > (Utility).

The Utility screen appears.

3. Touch <Options>.

The Rhythm Option screen appears.

4. Touch <><> to display the Auto Std Tempo (Auto Standard Tempo).



5. Touch the Auto Std Tempo setting to switch between "ON" and "OFF."

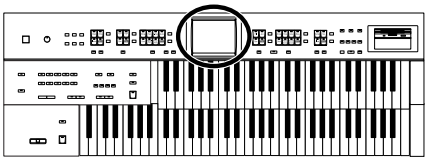
Each time you touch the Auto Std Tempo setting, it will alternate between "ON" and "OFF."

Setting	Descriptions
ON	Switching the rhythm while the rhythm is stopped automatically changes the tempo settings to those in the new rhythm.
OFF	When the rhythm is stopped, the tempo settings are not changed automatically when the rhythms are changed.

6. Touch <Exit>.

MEMO

This setting remains stored in memory even while power is turned off.



Registration Settings

■ Changing the Timing at Which Arranger Settings are Recalled

You can specify how the settings related to Rhythm performances and Automatic Accompaniment will be recalled when you press a Registration button.

1. Touch <Registration> on the Main screen.

The sub-window appears.

2. Touch <Load>.

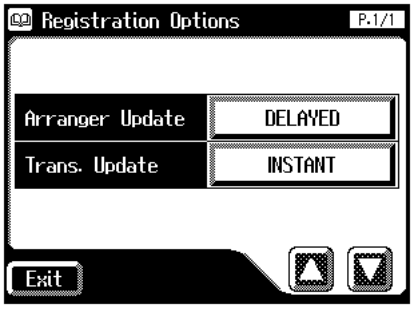
The Registration Load screen appears.

3. Touch <Utility>.

The Utility screen appears.

4. Touch <Options>.

The Registration Options screen appears.



5. Touch the Arranger Update setting to switch between "DELAYED" and "INSTANT."

Each time you touch the Arranger Update setting, it will alternate between "DELAYED" and "INSTANT."

Setting	Descriptions
DELAYED	Settings related to Rhythm performances and Automatic Accompaniment will be recalled when you hold a Registration button for several seconds. If you quickly press the Registration button, only the panel settings (voice, etc.) that are not related to Rhythm and Automatic Accompaniment will be updated.
INSTANT	Settings related to Rhythm performances and Automatic Accompaniment will be recalled the instant you press a button along with all other panel settings.

6. Touch <Exit>.

MEMO

This setting remains stored in memory even while power is turned off.

■ Changing the Timing at Which Transposition Settings are Recalled

You can specify how the transpose setting will be recalled when you press a Registration button.

1. Touch <Registration> on the Main screen.

The sub-window appears.

2. Touch <Load>.

The Registration Load screen appears.

3. Touch <Utility>.

The Utility screen appears.

4. Touch <Options>.

The Registration Options screen appears.

5. Touch the Trans. Update (Transpose Update) setting to switch between "DELAYED" and "INSTANT."

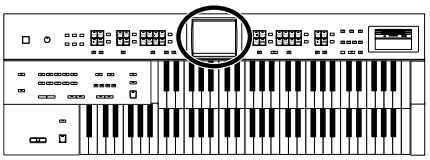
Each time you touch the Trans. Update setting, it will alternate between "DELAYED" and "INSTANT."

Setting	Descriptions
DELAYED	Transpose settings will be recalled when you hold a Registration button for several seconds.
INSTANT	Transpose setting will be recalled the instant you press a button along with all other panel settings.

6. Touch <Exit>.

MEMO

This setting remains stored in memory even while power is turned off.



Composer settings

■ Switching the Display of Lyrics On or Off

Some music files have Lyrics included and these Lyrics can be displayed on the screen. You can turn on or off the lyrics display of such music files.

1. Touch <Rec/Play> on the Main screen.

The Rec/Play screen appears.

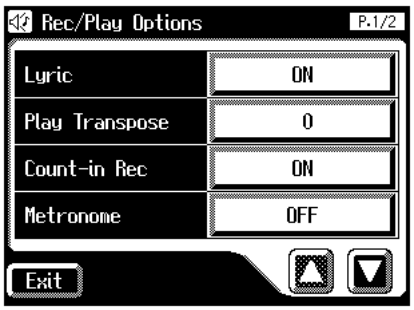
2. Touch <[ ]> (Utility).

The Utility screen appears.

3. Touch <Options>.

The Rec/Play Options screen appears.

4. Touch <[▲]><[▼]> to display the Lyric.



5. Touch the Lyric setting to switch between "ON" and "OFF."

Each time you touch the Lyric setting, it will alternate between "ON" and "OFF."

Setting	Descriptions
ON	Lyrics will be displayed
OFF	Lyrics will not be displayed

6. Touch <Exit>.

NOTE

If you press a voice select button while playing back music files that contains lyrics, the display screen will switch, and the lyrics will no longer be displayed. To re-display the lyrics, touch <Play> on Rec/Play screen once again.

MEMO

This setting remains stored in memory even while power is turned off.

■ Changing the Key When Playing Back Songs (Play Transpose)

SMF music files or a performance that you yourself recorded can be transposed for playback.

1. Touch <Rec/Play> on the Main screen.

The Rec/Play screen appears.

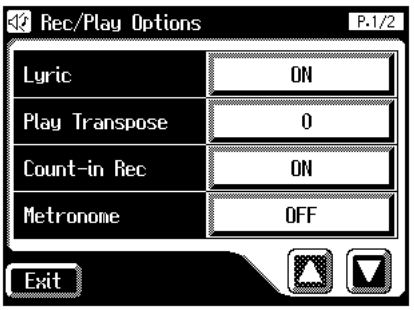
2. Touch <[ ]> (Utility).

The Utility screen appears.

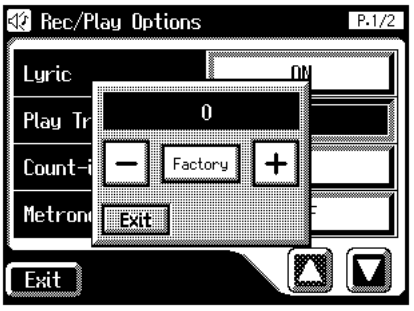
3. Touch <Options>.

The Rec/Play Options screen appears.

4. Touch <[▲]><[▼]> to display the Play Transpose.



5. Touch the Play Transpose setting.

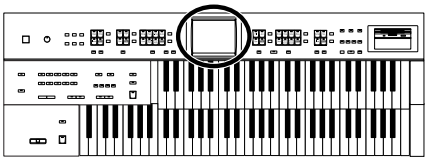


6. Touch <[−]><[+]> to change the setting.

The key is transposed by one semitone each time the <[−]> or <[+]> key is touched.

Settings **-24 – +24 (semitone steps)**

7. Touch <Exit>.



■ Changing the Metronome Setting

1. Touch <Rec/Play> on the Main screen.

The Rec/Play screen appears.

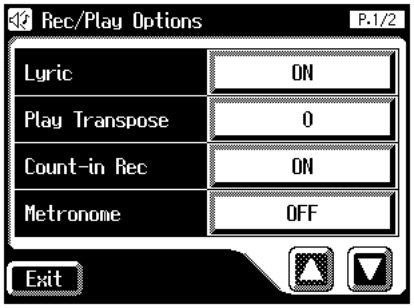
2. Touch <[ ]> (Utility).

The Utility screen appears.

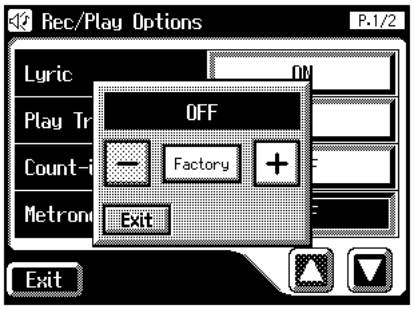
3. Touch <Options>.

The Rec/Play Options screen appears.

4. Touch <[▲]><[▼]> to display the Metronome.



5. Touch the Metronome setting.



6. Touch <[−]><[+]> to change the setting.

Setting	Descriptions
OFF	Not heard at all
REC	Heard only while recording
ON	Heard constantly

7. Touch <Exit>.

■ Adjusting the Metronome Volume

You can adjust the volume of the metronome.

1. Touch <Rec/Play> on the Main screen.

The Rec/Play screen appears.

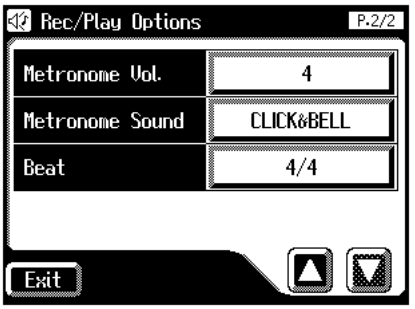
2. Touch <[ ]> (Utility).

The Utility screen appears.

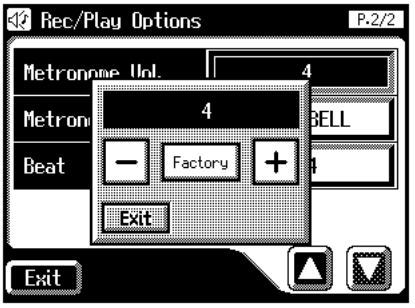
3. Touch <Options>.

The Rec/Play Options screen appears.

4. Touch <[▲]><[▼]> to display the Metronome Vol. (Metronome Volume).



5. Touch Metronome Vol. setting.

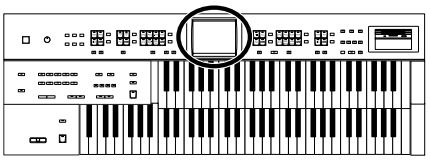


6. Touch <[−]><[+]> to change the setting.

Settings **1–10**

Increasing the value will raise the volume of the metronome.

7. Touch <Exit>.



■ Changing the Sound of the Metronome

You can choose one of 4 different sounds for the metronome.

1. Touch <Rec/Play> on the Main screen.

The Rec/Play screen appears.

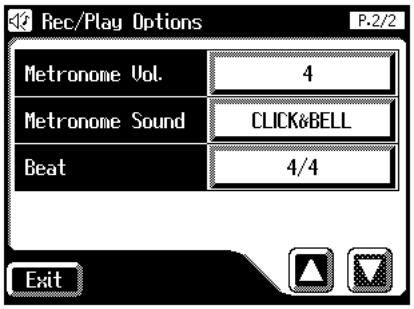
2. Touch <[ ]> (Utility).

The Utility screen appears.

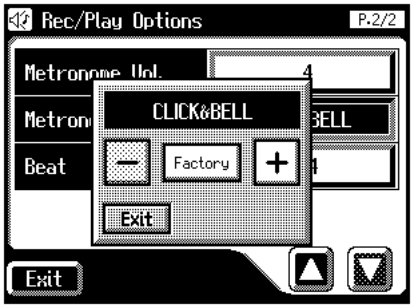
3. Touch <Options>.

The Rec/Play Options screen appears.

4. Touch <[▲]><[▼]> to display the Metronome Sound.



5. Touch the Metronome Sound setting.



6. Touch <[−]><[+]> to change the setting.

Setting	Descriptions
CLICK&BELL	Conventional metronome sound
ELECTRONIC	Electronic metronome sound
VOICE ENG.	Human voice (English)
VOICE JPN.	Human voice (Japanese)

7. Touch <Exit>.

MEMO

This setting remains stored in memory even while power is turned off.

■ Setting the Beat

This setting determines the beat to be used when recording performance songs.

1. Touch <Rec/Play> on the Main screen.

The Rec/Play screen appears.

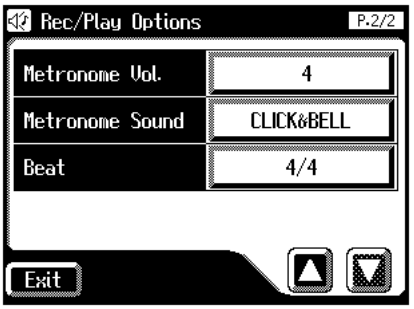
2. Touch <[ ]> (Utility).

The Utility screen appears.

3. Touch <Options>.

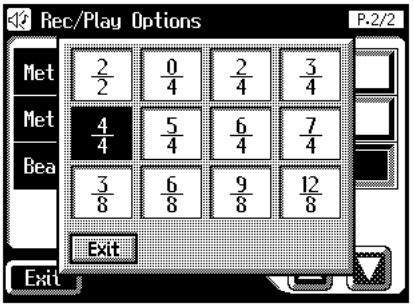
The Rec/Play Options screen appears.

4. Touch <[▲]><[▼]> to display the Beat.



5. Touch the Beat setting.

The time signature setting screen appears.



6. Touch the time signature that you wish to set.

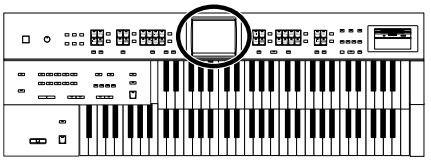
7. Touch <Exit>.

MEMO

When recording Rhythm performances or Automatic Accompaniment, the beat is set automatically.

NOTE

You cannot change the beat of previously recorded songs.



Other Settings

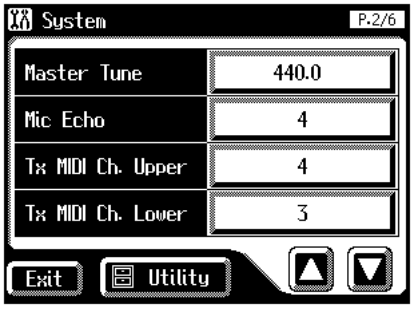
■ Adjusting the Standard Pitch (Master Tune)

The basic pitch of an instrument is generally considered as the pitch of the middle A note. The "Master Tune" parameter lets you adjust this basic pitch to match the pitch of any other instruments that are playing together with the AT-45.

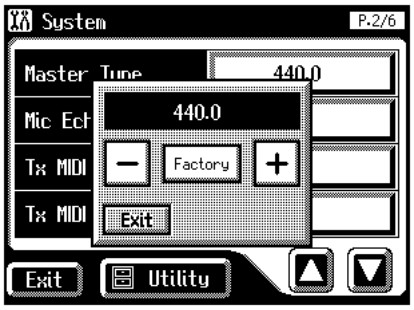
1. Touch <System> on the Main screen.

The System screen appears.

2. Touch <▲><▼> to display the Master Tune.



3. Touch the Master Tune setting.



4. Touch <−><+> to change the setting.

Settings **415.3Hz–466.2Hz (0.1 Hz units)**

5. Touch <Exit>.

MEMO

By touching <Factory>, you can restore the default setting (440.0 Hz).

MEMO

This setting remains stored in memory even while power is turned off.

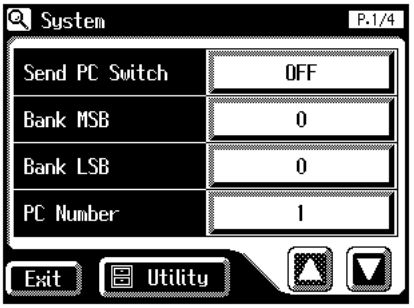
■ Enabling Transmission of PC Numbers

Transmission of PC (Program Change) numbers can be switched ON/OFF when a Registration is selected.

1. Touch <System> on the Main screen.

The System screen appears.

2. Touch <▲><▼> to display the Send PC Switch.



3. Touch the Send PC Switch setting to switch between "ON" and "OFF."

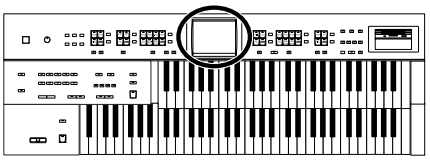
Each time you touch the Send PC Switch setting, it will alternate between "ON" and "OFF."

Setting	Descriptions
ON	PC numbers are transmitted
OFF	PC numbers are not transmitted

4. Touch <Exit>.

MEMO

This setting remains stored in memory even while power is turned off.



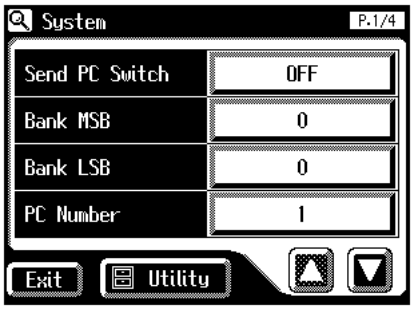
■ Setting the PC Number

You can specify the Program Change number that will be transmitted from MIDI Out when a Registration is selected.

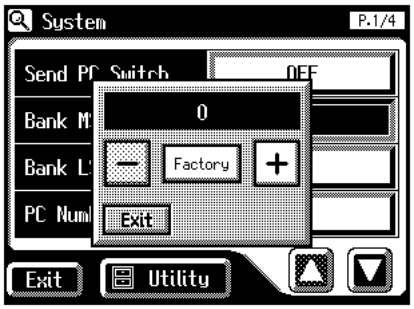
1. Touch <System> on the Main screen.

The System screen appears.

2. Touch <▲><▼> to display the Bank MSB (Bank Select MSB), Bank LSB (Bank Select LSB), or PC Number (Program Change Number).



3. Touch either <Bank MSB>, <Bank LSB>, or <PC Number> setting.



4. Touch <−><+> to change the setting.

Menu	Setting
Bank MSB	0–127
Bank LSB	0–127
PC Number	1–128

5. Touch <Exit>.

■ MIDI IN Mode

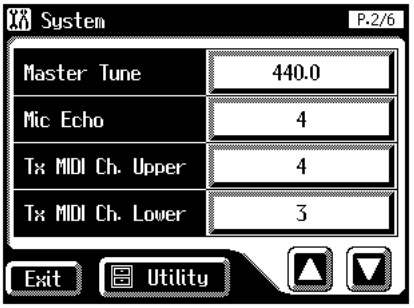
This instrument contains two sound generators: one for GM2/GS data playback and one for keyboard performance.

Normally, data received at the MIDI In connector will control only the sound generator for GM2/GS data playback. However by changing the MIDI IN Mode setting, you can also control the keyboard sound generator from MIDI In.

1. Touch <System> on the Main screen.

The System screen appears.

2. Touch <▲><▼> to display the MIDI IN Mode.

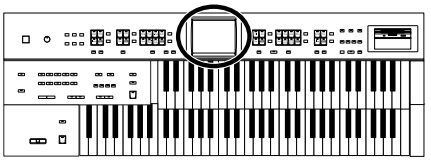


3. Touch the MIDI IN Mode setting to switch between "MODE 1" and "MODE 2."

Each time you touch the MIDI IN Mode setting, it will alternate between "Mode 1" and "Mode 2."

MODE 1	Control the instrument as a GS sound generator
MODE 2	Channels 5 through 10 and Channels 12, 14, 15 are transmitted to the GS sound generator, and all other channels are transmitted to the keyboard sound generator.

Channel	MODE 1	MODE 2
1	GS	Solo
2	GS	Pedal/GS*
3	GS	Lower
4	GS	Upper
5–10	GS	GS
11	GS	Drum/SFX
12	GS	GS
13	GS	Nothing
14–15	GS	GS
16	GS	Control



* *When the pedal part button is ON, data received at the MIDI In connector will control the pedal part of keyboard sound generator. When the pedal part button is OFF, data received at the MIDI In connector will control the GS sound generator.*

4. Touch <Exit>.

MEMO

There are limitations on the types of MIDI messages that can be received by the keyboard sound source. For details refer to the "MIDI IMPLEMENTATION" (sold separately).

MEMO

This setting remains stored in memory even while power is turned off.

■ Selecting the MIDI Transmit Channel

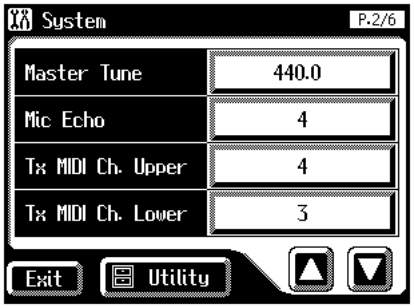
When you use the MIDI connectors of the AT-45 to transmit musical data to external devices, for each keyboard (Upper, Lower, and Pedal) you can specify the channel on which your playing will be transmitted as MIDI messages.

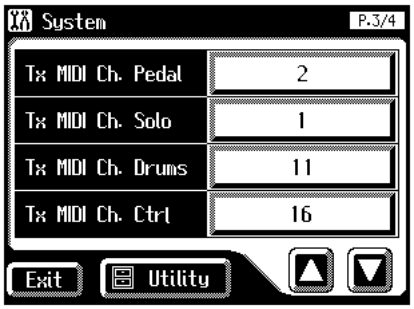
MEMO

For details refer to p. 186.

1. Touch <System> on the Main screen.

The System screen appears.

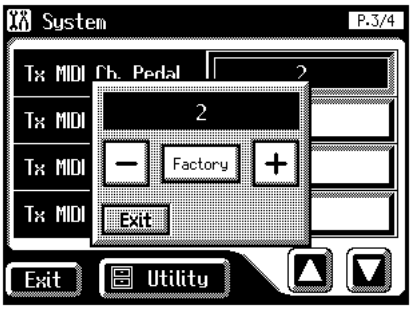




2. Touch <Tx MIDI Ch. Upper>, <Tx MIDI Ch. Lower>, <Tx MIDI Ch. Pedal>, <Tx MIDI Ch. Solo>, <Tx MIDI Ch. Drums> (Tx MIDI Ch. Drums/SFX) or <Tx MIDI Ch. Cntrl> (Tx MIDI Ch. Control).

The Control part transmits Expression pedal data and PC numbers.

3. Touch <[−]><[+]> to change the setting.

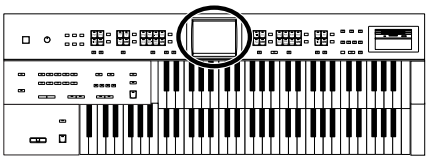


Channel **1–16**

4. Touch <Exit>.

NOTE

MIDI messages for the Solo part will be transmitted only when the Solo [To Lower] button is ON.



■ Repositioning the Touch Screen

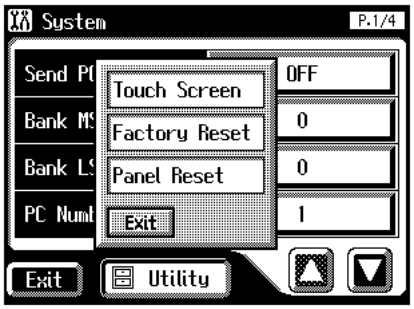
If you've been using the Touch Screen for some time, the pointer may be shifted, making the AT-45 react incorrectly. You should correct this displacement when necessary by performing calibration (repositioning).

1. Touch <System> on the Main screen.

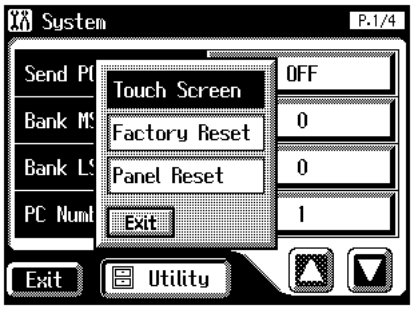
The System screen appears.

2. In the System screen, touch <Utility>.

The Utility screen appears.



3. Touch <Touch Screen>.



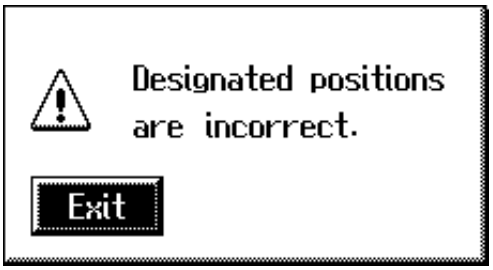
A display will ask for confirmation.
To cancel the operation, touch <Cancel>.

4. Touch <OK> on the screen.

5. Touch the points indicated on the touch screen.

NOTE

Do this carefully, because touching a location that's different from the one indicated for the pointer may make the displacement even worse. Be sure to touch the pointer accurately. If the following display appears, perform the touch panel position adjustment once again.



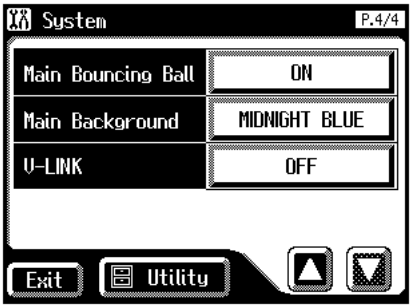
■ Switching the Background of the Main Screen

You can change the color and pattern for the main screen's background.

1. Touch <System> on the Main screen.

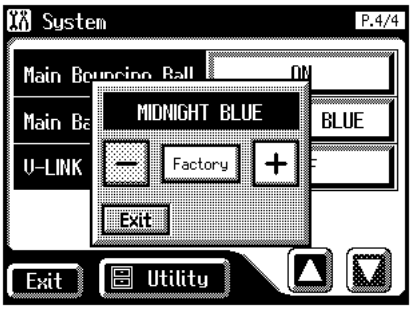
The System screen appears.

2. Touch <▲><▼> to display the Main Background.



3. Touch the Main Background setting.

4. Touch <−><+> to change the setting.



5. Touch <Exit>.

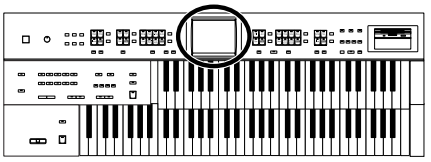
The System screen appears.

6. Touch <Exit> on the System Screen.

The main screen appears with the selected background.

MEMO

This setting remains stored in memory even while power is turned off.



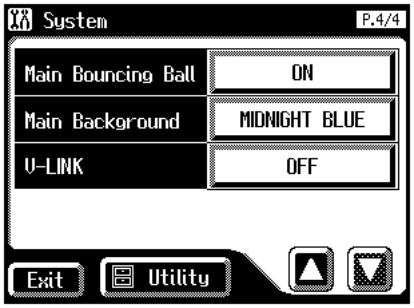
■ Eliminating the Bouncing Ball from the Main Screen

You can set the main screen so that the bouncing ball does not appear.

1. Touch <System> on the Main screen.

The System screen appears.

2. Touch <▲><▼> to display the Main Bouncing Ball.



3. Touch the Main Bouncing Ball setting to switch between "ON" and "OFF."

Each time you touch the Main Bouncing Ball setting, it will alternate between "ON" and "OFF."

Setting	Descriptions
ON	The bouncing ball appears in the main screen.
OFF	The bouncing ball does not appear in the main screen.

4. Touch <Exit>.

MEMO

This setting remains stored in memory even while power is turned off.

■ Using the V-LINK function

Connecting the AT-45 to a V-LINK compatible image device allows you to control the images with the AT-45.

V-LINK

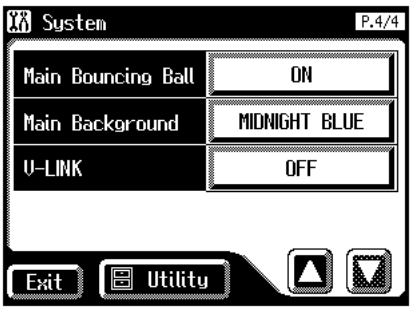
V-LINK (V-LINK) is functionality promoted by Roland that allows linked performance of music and visual material. By using V-LINK-compatible video equipment, visual effects can be easily liked to, and made part of the expressive elements of a performance.

How to Use the V-LINK

1. Touch <System> on the Main screen.

The System screen appears.

2. Touch <▲><▼> to display the V-LINK.



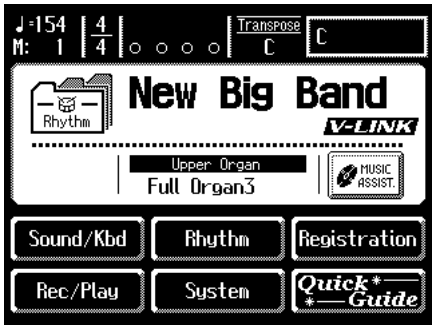
3. Touch the V-LINK setting.

4. Touch <−><+> to change the setting.

Setting	Descriptions
OFF	The V-LINK function is switched off.
MODE 1	The V-LINK function is switched on. You can now control the video images using the Registration buttons.
MODE 2	The V-LINK function is switched on. You can now control the video images using the twelve keys at the very right of the lower keyboard and Registration buttons. No sound is produced when you press any of the twelve keys at the right end of the keyboard.

5. Touch <Exit>.

The V-LINK function is turned on, and the V-LINK icon appears in the main screen.



MEMO

The Send PC Switch settings is automatically switched to ON when V-LINK is on (MODE 1, MODE 2). When the V-LINK function is switched off, the Send PC Switch setting reverts to the setting in effect before V-LINK was switched on.

When V-LINK is set to "MODE 1"

When a Registration button is pressed, "Bank Select" and "Program Change Number" messages are transmitted from the MIDI Out connector as video control messages. At this time, the Control MIDI transmit channel setting is disregarded, and the messages are transmitted via Channel 16.

When V-LINK is set to "MODE 2"

In addition to the functions of "MODE 1," MODE 2 also sets the device to transmit "Note messages" as video control messages from the MIDI Out connector when one of the twelve rightmost keys in the Lower keyboard is pressed.

In this case, the Lower and Solo MIDI transmit channel settings are disregarded, and the messages are transmitted via Channel 16.

NOTE

The MIDI transmit channel used for video control messages is fixed at channel 16.

NOTE

For more on switching video images, refer to the owner's manual for the connected device.

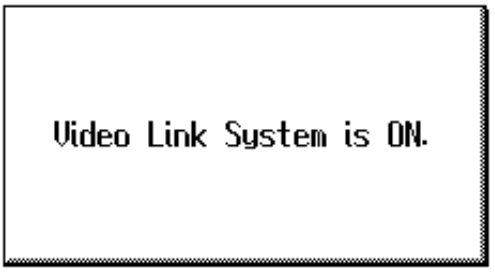
MEMO

You can also use the following procedure to turn the V-LINK function on.

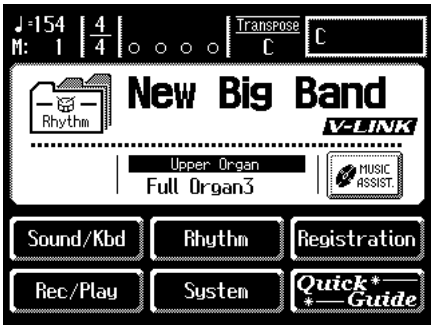
1. Hold down the Composer [Reset] button and press either the Upper Organ [Full] button or the Upper Organ [Jazz] button.

Holding down the Composer [Reset] button and pressing the Upper Organ [Full] button switches the instrument to "MODE 1" (p. 182). Holding down the Composer [Reset] button and pressing the Upper Organ [Jazz] button switches the instrument to "MODE 2" (p. 182).

The display changes as shown below, and the AT-45 switches to Image Control mode.



The V-LINK function is turned on, and the V-LINK icon appears in the main screen.



2. To cancel the V-LINK function, once again hold down the Composer [Reset] button and press either the Upper Organ [Full] button or the Upper Organ [Jazz] button.

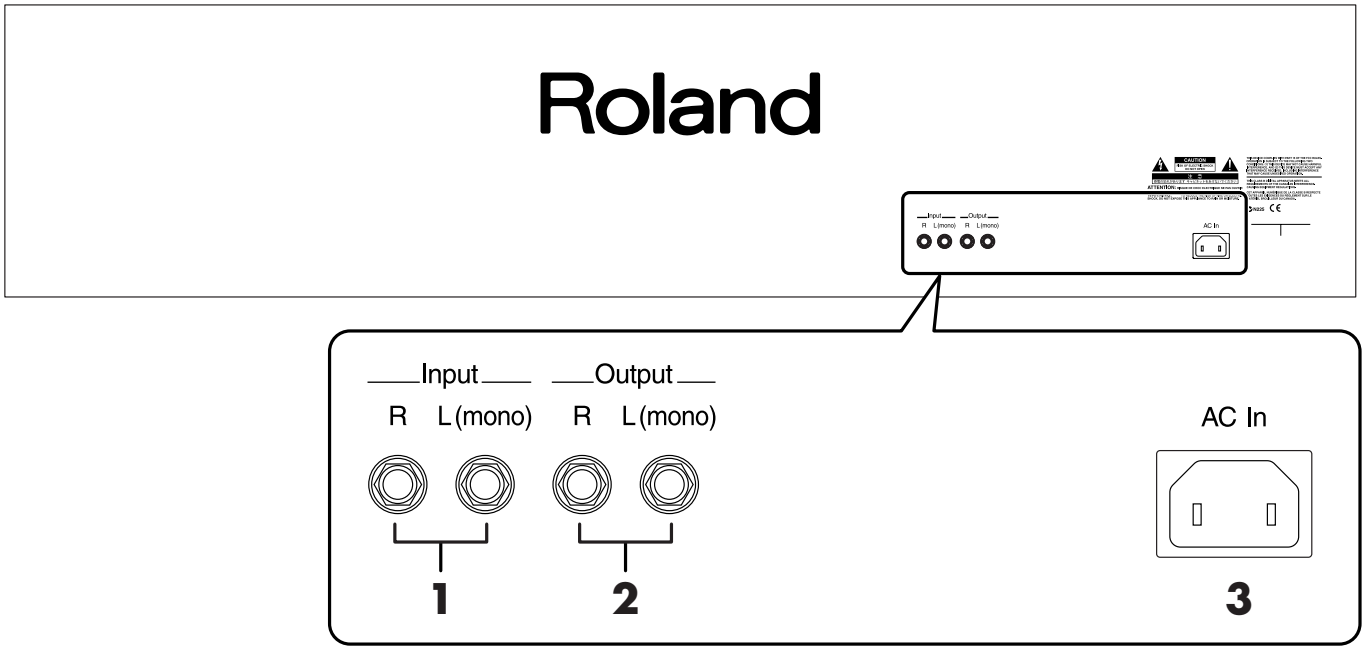
If set to "MODE 1" (p. 182), holding down the Composer [Reset] button and pressing the Upper Organ [Full] button switches the V-LINK function off. If set to "MODE 2" (p. 182), holding down the Composer [Reset] button and pressing the Upper Organ [Jazz] button switches the V-LINK function off.

Chapter 11 Connecting with External Device

Name and Functions of Jack and Connectors

The functions of the jacks on the bottom of the keyboard are described below.

Rear Panel



1. Input L(mono)/R Jacks

Using this jack, you can connect other sound generating devices or audio equipment and play sounds from other devices through the AT-45's speaker.

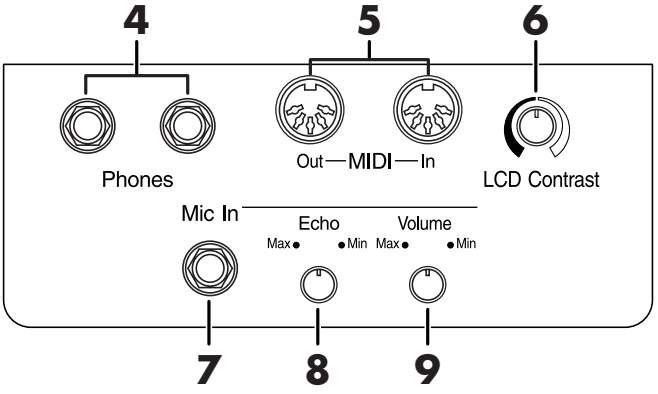
2. Output L(mono)/R Jacks

You can some sounds if you connect speakers or other audio equipment to these jacks. You can also hook up a cassette recorder to record your performances.

3. AC Inlet

Connect the included power cord to this inlet (p. 17).

Bottom Panel



4. Phones Jacks → p. 18

5. MIDI In/Out Connectors

You can connect external MIDI devices to the AT-45 and exchange performance data between them.

6. LCD Contrast Knob

Adjust the brightness of the touch panel.

7. Mic In Jack → p. 18

8. Mic Echo Knob → p. 18

9. Mic Volume Knob → p. 18

Connecting to Audio Equipment

When you connect the AT-45 to audio equipment, you can play the sounds from the AT-45 through the speakers on the audio equipment or record your performances on a tape recorder or other recording device.

MEMO

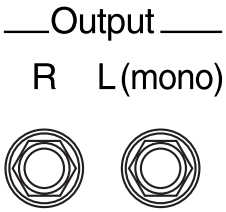
When connecting, please use an audio cable with a standard phone plug, such as the PCS-100PW (sold separately). When purchasing an audio cable, please consult the vendor where you bought the AT-45.

Connectors

Output Jacks

You can connect audio equipment using audio cables (sold separately) and play the sounds from the AT-45 through the speakers on the connected equipment or record your performances on a tape recorder or other recording device.

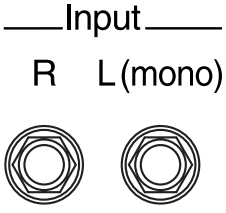
If the input of the connected device is monaural, you must use the L (Mono) jack.



Input Jacks

You can connect another sound module, such as audio equipment or an electronic instrument using audio cables (sold separately) and play the sounds from the connected device through the speakers on the AT-45.

If the input of the connected device is monaural, you must use the L (Mono) jack.



Making the Connections

MEMO

When connecting, turn on power to your various devices in the order specified. Failure to follow these steps in the order given could cause a malfunction and/or damage to speakers or other equipment.

Playing Sounds from the AT-45 Through the Speakers on Audio Equipment or Recording Your Performances on a Recording Device

1. **Turn the volume all the way down on the AT-45 and on the device you're about to connect.**
2. **Turn off the power to the AT-45 and other connected equipment.**
3. **Use audio cables (sold separately) to make the connection.**
4. **Switch on the AT-45.**
5. **Switch on the connected device.**
6. **Adjust the volume level on the AT-45 and the connected device.**

Recording AT-45 Performances on a Recording Device

7. **Start recording with the connected device.**
8. **Play the keyboard.**
9. **When the performance ends, stop recording on the connected equipment.**

Playing Audio Equipment Sounds Through the Speakers on the AT-45

1. **Turn the volume all the way down on the AT-45 and on the device you're about to connect.**
2. **Turn off the power to the AT-45 and other connected equipment.**
3. **Use audio cables (sold separately) to make the connection.**
4. **Turn on the connected equipment.**
5. **Turn on the AT-45.**
6. **Adjust the volume level on the AT-45 and the connected device.**

After use, turn off the power using the following procedure.

1. **Turn the volume all the way down on the AT-45 and on the device you're about to connect.**
2. **Turn off the connected equipment.**
3. **Turn off the AT-45.**

Connecting MIDI Devices

By connecting an external MIDI device and exchanging performance data, you can control the performances on one device from the other. For instance, you can output sound from the other instrument or switch Tones on the other instrument.

What's MIDI?

MIDI, short for "Musical Instrument Digital Interface," was developed as a standard for the exchange of performance data between electronic instruments and computers.

The AT-45 is equipped with MIDI connectors to let it exchange performance data with external devices. These connectors can be used to connect the AT-45 to an external device for even greater versatility.

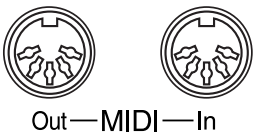
About MIDI Connectors

The AT-45 has two kinds of MIDI connectors.

Connecting these to the MIDI connectors on a MIDI instrument makes it possible for the two instruments to control each other.

For instance, you can output sound from the other instrument or switch tones on the other instrument.

You should also set the MIDI send channel as needed.



MIDI Out Connector

The notes played on the keyboard, movements of the Damper pedal, Expression data, data indicating that a Registration button, etc., was pressed will be transmitted to the external MIDI connector. The Solo voice will be transmitted only if the Solo [To Lower] button is ON.

MIDI In Connector

Performance messages from an external MIDI device are received here.

These incoming messages may instruct the receiving MIDI instrument to play sounds or switch tones.

The AT-45 contains two sound generators: one sound generator for its own keyboards and one GS sound generator (p. 213). Normally, musical data transmitted from an external device to the MIDI In connector is sent to the GS sound generator, but you can also set the "MIDI IN Mode" parameter (p. 179) so that the keyboard sound generator is controlled.

Making the Connections

NOTE

When connecting, turn on power to your various devices in the order specified. Failure to follow these steps in the order given could cause a malfunction and/or damage to speakers or other equipment.

1. **Turn the volume all the way down on the AT-45 and on the device you're about to connect.**
2. **Switch off the power to the AT-45 and the device you're about to connect.**
3. **Use a MIDI cable (sold separately) to connect the MIDI connectors to each other.**
4. **Switch on the power to the AT-45 and the connected device.**
5. **Adjust the volume level on the AT-45 and the connected device.**
6. **You should also set the MIDI send channel as needed (p. 180).**

MEMO

A separate publication titled "MIDI Implementation" is also available. It provides complete details concerning the way MIDI has been implemented on this unit. If you should require this publication (such as when you intend to carry out byte-level programming), please contact the nearest Roland Service Center or authorized Roland distributor.

Connecting a Computer

You can connect between your computer and the MIDI connector of the AT-45 using a Roland UM-1 or similar USB MIDI interface cable (sold separately).

If the AT-45 is connected to a computer in which sequencer software such as EDIROL's "Visual MT" is installed, a song you've recorded on the AT-45 can be saved on your computer.

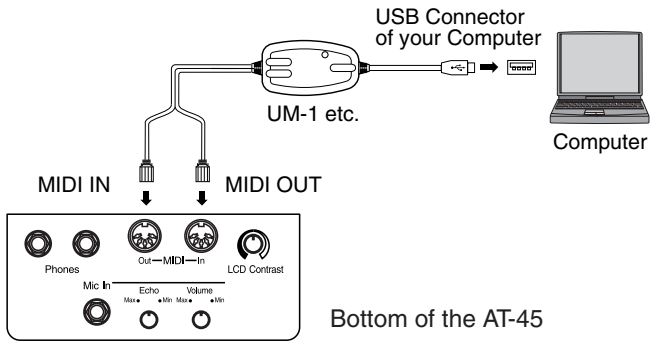
Connection examples

NOTE

To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.

* *In order to make connections to your computer, you must install "MIDI driver" software on your computer. For details, refer to the owner's manual for your MIDI interface.*

Use a USB MIDI interface cable to connect the USB connector of your computer to the MIDI connectors of the AT-45.



Bottom of the AT-45

Troubleshooting

If the AT-45 does not function in the way you except, first check the following chart. If this does not resolve the problem, consult your dealer or a nearby Roland Service Station.

Problem	Check	Solution	Page
When you press the [Power On] switch, the power doesn't come on.	Power cord is not connected correctly.	Connect the power cord correctly.	**p. 17**
No sound is heard.	The [Master Volume] knob is set too low.	Turn the [Master Volume] knob toward "Max."	**p. 17**
	Headphones are connected. When you connect the headphones, the sound is heard only through the headphones.	If you want sound to be output from the speakers, disconnect the headphones.	**p. 18**
	The plug is still plugged into the headphone jack.	Disconnect the plug from the headphone jack.	**p. 18**
	The volume is set too low on the Level [▲] [▼] buttons.	Press the Level [▲][▼] buttons to raise the volume.	**p. 44**
	The volume is set too low on the Expression Pedal.	Advance the expression pedal.	**p. 107**
	You do not have a Voice selected. Voices that have their button indicator lit can be played.	Press a voice button to select a voice.	**p. 34**
No sound is heard. (by the Lower keyboard)	Drums/SFX are selected for the Lower keyboard, but you are playing a key to which no drum sound is assigned.	Turn the Drums/SFX off or play keys to which drums sounds are assigned.	**p. 48**
No sound is heard (when a MIDI instrument is connected).	The power of the connected external devices is not turned on.	Use the correct procedure to turn on the power of the connected external devices.	**p. 185 – p. 187**
Damper Pedal does not operate.	The damper pedal affects only the Lower keyboard and Upper keyboard. The damper pedal does not affect the Bass pedalboard.	You can change the settings so that the damper pedal affects the Upper keyboard.	**p. 171**
	The damper pedal does not affect the Solo voice.	This is not a malfunction.	**- - -**
Expression Pedal does not operate.	The function of the Expression Pedal during recording or the function during playback has been set to "COMPOSER."	Set the expression pedal function during recording to "PEDAL," and during playback to "PEDAL" or "PEDAL+COMPOSER."	**p. 170**
Can't use the function assigned to the foot switch.	If "Regist Shift" (change Registrations) is "RIGHT," "LEFT," or "RIGHT + Load Next," the foot switch will be dedicated to switching the Registration.	Turn "Regist Shift" off.	**p. 106**
When the human voice "Jazz Scat" is selected, playing dynamics do not change the sound.	The setting of "Initial Touch" is turned OFF.	Turn "Initial Touch" on.	**p. 169**

Problem	Check	Solution	Page
Rotary effect is not be applied.	Some sounds do not allow the rotary effect to be applied.	This is not a malfunction.	**- - -**
Chorus effect does not apply.	Some sounds do not allow the chorus effect to be applied.	This is not a malfunction.	**- - -**
When you release your fingers from keys in the Lower keyboard while Automatic Accompaniment and Rhythm are playing, the Rhythm performance only remains playing.	Chord Hold is at OFF.	Turn "Chord Hold" on. The Automatic Accompaniment will play while you press a chord. If Chord Hold is turned ON, the Automatic Accompaniment will continue playing with the Rhythm even when you take your hand off of the Lower keyboard.	**p. 172**
When you release your fingers from keys in the Lower keyboard, the notes continue sounding.	The Lower Voice [Hold] button is at ON.	Press the Lower Voice [Hold] button to turn it off (dark).	**p. 50**
Even though you press only one key, a multiple number of notes sound.	Harmony Intelligence is at ON.	Turn "Harmony Intelligence" off.	**p. 109**
	Chord Intelligence is turned ON.	Turn "Chord Intelligence" off.	**p. 60**
Sound is produced when you take your finger off a key.	You have selected a "Marimba Treml" sound.	This is not a malfunction. If you select a "Marimba Treml" sound, a sound will also be produced when you take your finger off the key.	**- - -**
Automatic Accompaniment sounds odd.	The keys for a chord were not pressed simultaneously.	Either turn on the Chord Intelligence function, or play the chord correctly.	**p. 60**
	When Chord Intelligence is OFF, the chord is not being pressed correctly.	Either turn on the Chord Intelligence function, or play the chord correctly.	**p. 60**
	When performance data from a device other than the AT-45 is being played together with the Automatic Accompaniment, the Automatic Accompaniment may not be sounded correctly.	This is not a malfunction.	**- - -**
Rhythm sounds odd.	When performance data from a device other than the AT-45 is being played together with the Automatic Accompaniment, the Rhythm performance may not be sounded correctly.	This is not a malfunction.	**- - -**
Pitch is off	Transpose is in effect.	Simultaneously press the Transpose [-][+] buttons to cancel the transposition (the Transpose [-][+] buttons' indicators will go out).	**p. 102**
	The tuning is incorrect.	Adjust the standard pitch.	**p. 178**
	While set for an octave shift, you are playing keys beyond the recommended range.	Adjust the Octave Shift setting.	**p. 46**

Problem	Check	Solution	Page
Recording is not possible.	If you wish to erase a previously-recorded track and then re-record, press the track button for the desired track to make that button blink before you begin recording.	Press the track button for the desired track to make that button indicator blink before you begin recording.	**p. 140**
	If you wish to erase a previously-recorded track and then re-record, touch the track button for the track you want to record in the Rec/Play screen, stopping the button from flashing.	On Rec/Play screen, touch the track button for the desired track to make that button indicator blink before you begin recording.	**p. 140**
The recorded performance has disappeared.	Any performance that has been recorded is deleted when the power to the unit is turned off.	A performance cannot be restored once it's been deleted, so be sure to save it on a floppy disk before you turn off the power.	**p. 143**
The bass note of the Automatic Accompaniment does not sound.	When a voice is selected for the Pedal Bass part, the bass of the Automatic Accompaniment will not sound.	This is not a malfunction.	**- - -**
When you started a Rhythm with an Intro, the Rhythm did not sound.	Some Rhythms do not have rhythm sounds in the intro.	This is not a malfunction.	**- - -**
Sound is distorted / cracked.	The Part Balance volume of each part is too high.	Press the Part Balance button to lower the volume.	**p. 44**
	The Reverb volume has been raised when the volume of each Part Balance button is already raised.	Either lower the Reverb volume, or adjust the Part Balance of each part.	**p. 44** **p. 118**
	The [Master Volume] knob has been used to raise the overall volume excessively.	Use the [Master Volume] knob to lower the overall volume.	**p. 17**
Some keys (of certain keyboard parts) sound strange.	You are playing notes outside the recommended range of the voice.	This is not a malfunction.	**- - -**
The Rhythm does not change when you press the Registration buttons.	The settings at which Registrations are recalled (Registration Arranger Update) has been set to "DELAYED."	Set the timing at which the arranger settings are called up (Registration Arranger Update) to "INSTANT."	**p. 82** **p. 174**
The volume changes during playback of performance data.	When recording is performed repeatedly while changing the Part Balance volume, the previously-recorded Part Balance data remains in the Control track.	If you wish to get rid of the volume changes, use the Erase function to delete the Part Balance data.	**p. 153**
Bass is heard even though you are not playing the Bass Pedalboard.	The Pedal [To Lower] button is ON. When the Pedal [To Lower] button is ON, the Bass will be sounded by the Lower keyboard.	In the Pedal part, press the Pedal [To Lower] button to turn the button off (dark).	**p. 127**
When playing the same sound in the Upper keyboard and Lower keyboard, the volume is different.	On one of the keyboards, "Initial Touch" is turned ON.	Set the initial touch settings of the Upper keyboard and the Lower keyboard to both On, or both Off.	**p. 169**

Problem	Check	Solution	Page
Lower keyboard cannot be heard.	The Lower keyboard will not produce sound while an Intro or Ending is being played.	This is not a malfunction.	**- - -**
The sound is not played correctly.	If you layer the same type of sound (for example, Strings 1 and Strings 5), or play an octave-shifted organ sound, the timing at which you play a note or the phase relationship between the two sounds may affect the way in which the sounds are heard, but this is not a malfunction.	You are layering sounds of the same type (e.g., Strings 1 and Strings 5). Alternatively, you are playing an organ sound with Octave Shift. This is not a malfunction.	**- - -**
Can't play the demo songs.	A floppy disk is inserted in the disk drive.	In order to play the demo song, you must remove the floppy disk from the disk drive.	**p. 66**
Nothing appears on screen.	The AT-45 uses a liquid-crystal screen, so text may not be displayed when the ambient temperature is below freezing.	Adjust the brightness of the screen.	**p. 184**
Lyrics are not indicated properly in the display.	With some music files, the lyrics cannot be displayed correctly.	This is not a malfunction.	**- - -**
	In the Notation screen, some lyrics or notes could extend beyond the edges of the screen, and not be displayed.	This is not a malfunction.	**- - -**
	A button was pressed while the lyrics were being shown in the display. During the display of lyrics, you could be taken to a different screen if you press a button.	If you want to have the lyrics be displayed again, touch <Play> on the Rec/Play screen.	**p. 128**
The Touch Screen doesn't respond correctly.	The positioning of the Touch Screen may become displaced if some time has passed since it was last used	Reposition the Touch screen.	**p. 181**
Certain instrument are not heard while playing a song.	The track is muted.	Turn off track muting.	**p. 132** **p. 133**
Can't use Chord Intelligence function.	Chord Intelligence is at OFF.	Turn "Chord Intelligence" on.	**p. 60**
Notation is not indicated properly in the display.	In the Notation screen, some lyrics or notes could extend beyond the edges of the screen, and not be displayed.	This is not a malfunction.	**- - -**
	The notation display feature is particularly unsuitable for the display of difficult, complex musical works that demand accurate notation.	This is not a malfunction.	**p. 136**
	If you select a part that does not contain performance data, notes will not be displayed in the notation.	Change the part that is displayed.	**p. 135**

Problem	Check	Solution	Page
Vertical lines can be seen in the screen.	This is attributable to the design fundamentals of a liquid crystal display, and does not indicate a malfunction.	Adjusting the display's contrast can make such lines less noticeable, so you may want to try adjusting it.	**p. 184**
The Bass Range Sounds Odd, or There Is a Vibrating Resonance.	Playing at loud volumes may cause instruments near the AT-45 to resonate. Resonance can also occur with fluorescent light tubes, glass doors, and other objects. In particular, this problem occurs more easily when the bass component is increased, and when the sound is played at higher volumes.	Use the following measures to suppress such resonance. Place speakers so they are 10-15 cm from walls and other surfaces. Reduce the volume. Move the speakers away from any resonating objects.	**- - -**
	When listening through headphones: Here, a different cause (such as resonance produced by the AT-45) would be suspect.	Consult your Roland dealer or nearest Roland Service Center.	**- - -**
The volume level of the instrument connected to AT-45 is too low.	Could you be using a connection cable that contains a resistor?	Use a connection cable that does not contain a resistor.	**p. 185**
Pressing the expression pedal while playing back Atelier performance data produces a crackling noise	The expression pedal function is set to "PEDAL+COMPOSER" during playback of Atelier performance data. When this setting is used, moving the expression pedal while playing back Atelier performance data may create a difference between the expression pedal information in the performance data and the volume as set with the expression pedal, which can result in this kind of sound being produced.	Set the expression pedal function to "PEDAL" during playback.	**p. 171**
Tempo not changing even when the source tempo is reselected (when correcting rhythms using the Rhythm Customize function).	Auto Std Tempo (Auto Standard Tempo) is set to OFF. When you switch rhythms while the rhythm is stopped, the tempo is automatically set to the new rhythm. The tempo setting is not changed automatically even when you switch rhythms while the rhythm is stopped.	Turn "Auto Std Tempo" on.	**p. 173**
Unable to save created rhythm to the User Memory	"Memory Full" appears in the display. The available memory remaining in the AT-45 is not sufficient.	The available memory remaining in the AT-45 is not sufficient. First delete some other rhythm saved to the user memory, then save the rhythm you have created to the user memory once again.	**p. 77** **p. 168**

Problem	Check	Solution	Page
There is no sound from the twelve keys at the right of the lower keyboard.	The V-LINK function is set Mode 2. When V-LINK setting is Mode 2, the group of twelve keys starting at the very right of the lower keyboard are used for controlling video images. Therefore, no sounds are played even when you press these keys.	Turn the V-LINK function off, or select Mode 1 for the V-LINK function.	**p. 182**

Error Message

Error Message	Meanings
Copy Protected. Can't Save	To protect the copyright, this music file cannot be saved as SMF format.
Can't Save This Song.	You can only play the music data. It cannot be saved on a floppy disk or internal memory.
Write Protected Disk	The protect tab on the floppy disk is set to the Protect position. Change it to the Write position and repeat the procedure.
Master Disk	This floppy disk cannot store the format or save any data. Insert a different disk and repeat the procedure.
Read Only Song. Can't Save	A new song cannot be saved onto this floppy disk.
No Disk	No floppy disk is connected to the disk drive. Insert the disk correctly, and repeat the procedure.
Disk Full	There is not sufficient space left on the floppy disk for the data to be saved. Save the data onto a different floppy disk or delete music data on the disk.
Unknown Disk	The floppy disk inserted into the disk drive cannot be read. Please format the floppy disk.
Disk Ejected	The floppy disk was removed from the disk drive while loading or writing was in progress. Insert the floppy disk and repeat the procedure.
Damaged Disk	This floppy disk is damaged and cannot be used. Insert a different disk and repeat the procedure.
Can't Read	This song cannot be read.
Can't Play	It cannot be read the floppy disk quickly enough. Press the [Reset] button, then press the [Play/Stop] button to play the song.
Memory Full	The Rhythm data is excessively large, and cannot be loaded.
	The performance data is excessively large, and cannot be loaded.
	Since the internal memory is full, recording or editing is not possible.
MIDI Buffer Full	The AT-45 cannot deal with the excessive MIDI data sent from the external MIDI device. Reduce the amount of MIDI data sent to the AT-45.
Communication Error	A MIDI cable or audio cable has been disconnected. Connect it properly and securely.
Memory Error	There is something wrong with the system. Repeat the procedure from the beginning.

Error Message	Meanings
Internal Memory Near Limit	The AT-45 is warning you that its memory will soon become full to capacity, so not much more recording can be done.
Clear Song OK?	To carry out the procedure, you first need to erase performance data in the AT-45. This message asks you to confirm that you don't mind doing this. To erase the data, touch <OK> on the screen. When you do not want to erase it, touch <Cancel> then save the data on disk.
Overwrite Regist OK?	This Registration is already being used. To overwrite the previous Registration data in this memory, touch <OK>. If you decide to keep the previous Registration data in this memory and save your settings in an unused memory, select a number for which "---" is displayed, and then save the data.
Overwrite Song OK?	There already is performance data having the same name on the disk. To replace the existing data with the new version, touch <OK>. To save it as a separate new file, touch <Cancel> first. Then, after changing the name, save it on disk.
Overwrite Rhythm OK?	Overwrite the internal Rhythm. To replace the Rhythm, touch <OK>. When you do not want to overwrite it, touch <Cancel> then select another Rhythm.
Delete Song OK?	Delete the song stored on floppy disk. To delete the song, touch <OK>. When you do not want to delete it, touch <Cancel>.
Delete Rhythm OK?	Delete the Rhythm. To delete the Rhythm, touch <OK>. When you do not want to delete it, touch <Cancel>.

Voice List

■ Organ

- Full Organ1 *1
- Full Organ2 *1
- Full Organ3 *1
- Full Organ4 *1
- Full Organ5 *1
- Full Organ6 *1
- Full Organ7 *1
- Ballad Organ *1
- Jazz Organ1 *1
- Jazz Organ2 *1
- Jazz Organ3 *1
- Jazz Organ4 *1
- Jazz Organ5 *1
- Jazz Organ6 *1
- ComboJazzOrg *1
- Rock Organ1
- Rock Organ2
- Lower Organ1 *1
- Lower Organ2 *1
- Lower Organ3 *1
- Lower Organ4 *1
- Lower Organ5 *1
- Lower Organ6 *1
- Manual Bass *1
- Pipe Organ1
- Pipe Organ2
- Pipe Organ3
- Pipe Organ4
- Pipe Organ5
- Pipe Organ6
- Pipe Organ7
- AEx PipeOrg
- Diapason 8'
- FluteCeleste
- Tibia 8' *2
- Theater Or.1 *2
- Theater Or.2 *2
- Theater Or.3 *2
- Theater Or.4 *2
- Theater Or.5 *2
- Theater Or.6 *2
- Synth. Org.1 *2
- Synth. Org.2
- Synth. Org.3 *2
- Pop. Organ1 *1
- Pop. Organ2 *1
- Org. Attack1
- Org. Attack3
- Org. Click

■ Strings

- Orch.Str.Ens
- Strings1
- Strings2
- Strings5
- Strings6
- Pizzicato *2
- AEx Strings
- Slow Str.1
- Slow Str.2
- Synth. Str.1
- Synth. Str.2
- Violin *2
- AEx Violin *2
- Viola *2
- Cello *2

■ Human Voice

- Jazz Scat *2
- Jazz Doo *2
- Jazz Doot *2
- Jazz Dat *2
- Jazz Bap *2
- Jazz DowFall *2
- Pop Voice *2
- Classical
- Gregorian
- Choir
- Synth. Choir

■ Piano

- Grand Piano
- Piano3
- AEx PianoStr
- Honky-tonk
- StageE.Piano *2
- E.Piano1
- E.Piano2
- E.Piano3
- AEx EP+Str
- Harpsichord
- Clavi.

■ Guitar

- Nylon-str.Gt *2
- Ac.Gtr Sld *2
- Steel-str.Gt *2
- 12str Guitar *2
- Jazz Guitar *2
- Clean Guitar *2
- JC E.Guitar *2
- Overdrive Gt *2
- Hawaiian Gt. *2
- Banjo *2
- Mandolin
- Harp *2
- Koto *2
- Shamisen *2
- Sitar *2

■ Brass/Sax

- BrassSect.1 *2
- Orch.Tutti 1 *2
- Orch.Brs Ens *2
- Power Brass *2
- Tp. Section *2
- Fr.Horn Sect
- Fr.HornSect2
- Sax.Section *2
- Sax.Section2 *2
- Sax/Brass
- Synth. Brass *2
- Trumpet *2
- Trumpet2 *2
- Tp/Shake *2
- Mute Trumpet *2
- Flugel Horn *2
- Trombone *2
- F.Horn Solo1 *2
- Soprano Sax *2
- Soprano Sax2 *2
- Alto Sax Ex *2
- Alto Sax *2

*1 : Rotary: effective, Chorus: ineffective *2 : VIbrato: effective : Active Expression Voice

Blow Sax *2
AEx AltoSax *2
Tenor Sax *2

■ Woodwinds

Flute *2
Flute3 *2
AEx Flute *2
Synth. Flute
Oboe *2
Bassoon *2
Clarinet *2
Clarinet2 *2
Shakuhachi *2
Pan Flute *2
Bagpipe *2
HumanWhistle *2

■ Lead/Pad

Synth. Lead1 *2
Synth. Lead2 *2
Synth. Lead3 *2
Synth. Lead4 *2
Synth. Pad1
Synth. Pad2
Sugar Key *2
Accordion
Bandoneon *2
Harmonica *2

■ Bass

Organ Bass1
Organ Bass2
Pipe Org. Bs
Bombarde
Str.Bass Pdl *2
String Bass *2
Bass+Cymbal *2
Contrabass1 *2
Contrabass2 *2
AEx Bs+Timp
Tuba
Tuba3 *2
E.Bass1
E.Bass2 *2
Synth. Bass1
Voice Thum *2

■ Percussion

Timpani
Crash Cymbal *2
Ride Cymbal
Snare Drum
Bass Drum
Triangle *2
Tambourine
Perc. Set1
Perc. Set2
Vibraphone *2
Glockenspiel
Celesta
Organ Harp
Tubular-bell
Marimba
MarimbaTreml *3
Xylophone
Steel Drums
Santur *2
Music Box *2
Vibra Bells *2

■ AEx

AEx PipeOrg
AEx Strings
AEx Violin *2
AEx PianoStr
AEx EP+Str
AEx AltoSax *2
AEx Flute *2
AEx Bs+Timp

→ *The AEx voice group consists of all the AEx voices, taken from the entire collection of voices.*

→ *"Active Expression voices" can be assigned to the [Others] buttons of the Upper Orchestral part, Lower Orchestral part, and Solo part. Although you can select an Active Expression voice with the [Others] button for parts other than Lower Orchestral, Upper Orchestral, and Solo, no Active Expression effect is applied.*

*3 : The sounds will also be produced when you take your finger off the key.

Drums/SFX Set List

		JAZZ STANDARD		STANDARD 2		ROOM		ROOM 2	
	33	Metro.Click1		Metro.Click1		Metro.Click1		Metro.Click1	
	34	Metro.Bell 1		Metro.Bell 1		Metro.Bell 1		Metro.Bell 1	
	35	Std BD 2		Std2 BD 2		Std BD 2		Std2 BD 1	
C2	36	Std BD 1		Std2 BD 1		Std BD 1		Rm BD	
	37	Rim Shot		Rim Shot		Rim Shot		Rim Shot	
	38	Std SD 1		Std2 SD 1		Std SD 1		Rm SD 1	
	39	Hand Clap 1		Hand Clap 1		Hand Clap 1		Hand Clap 1	
	40	Std SD 2		Std2 SD 2		Std SD 2		Std2 SD 1	
	41	Lw Tom 2		Lw Tom 2		Rm Lw Tom 2		Rm2 Lw Tom 2	
	42	Std Close HH	[EXC1]	Std2 CloseHH	[EXC1]	Std Close HH	[EXC1]	Std2 CloseHH	[EXC1]
	43	Lw Tom 1		Lw Tom 1		Rm Lw Tom 1		Rm2 Lw Tom 1	
	44	Std Pedal HH	[EXC1]	Std2 PedalHH	[EXC1]	Std Pedal HH	[EXC1]	Std2 PedalHH	[EXC1]
	45	Md Tom 2		Md Tom 2		Rm Md Tom 2		Rm2 Md Tom 2	
	46	Std Open HH	[EXC1]	Std2 Open HH	[EXC1]	Std Open HH	[EXC1]	Std2 Open HH	[EXC1]
	47	Md Tom 1		Md Tom 1		Rm Md Tom 1		Rm2 Md Tom 1	
C3	48	Hi Tom 2		Hi Tom 2		Rm Hi Tom 2		Rm2 Hi Tom 2	
	49	Crash Cym 1		Crash Cym 1		Crash Cym 1		Crash Cym 1	
	50	Hi Tom 1		Hi Tom 1		Rm Hi Tom 1		Rm2 Hi Tom 1	
	51	Ride Cym 1		Ride Cym 1		Ride Cym 1		Ride Cym 1	
	52	China Cym		China Cym		China Cym		China Cym	
	53	Ride Bell		Ride Bell		Ride Bell		Ride Bell	
	54	Tambourine 1		Tambourine 1		Tambourine 1		Tambourine 1	
	55	Splash Cym		Splash Cym		Splash Cym		Splash Cym	
	56	Cowbell		Cowbell		Cowbell		Cowbell	
	57	Crash Cym 2		Crash Cym 2		Crash Cym 2		Crash Cym 2	
	58	Vibra-Slap 1		Vibra-Slap 1		Vibra-Slap 1		Vibra-Slap 1	
	59	Ride Cym 2		Ride Cym 2		Ride Cym 2		Ride Cym 2	
C4	60	Hi Bongo 1		Hi Bongo 1		Hi Bongo 1		Hi Bongo 1	
	61	Lw Bongo 1		Lw Bongo 1		Lw Bongo 1		Lw Bongo 1	
	62	Hi CongaMute		Hi CongaMute		Hi CongaMute		Hi CongaMute	
	63	Hi Conga 1		Hi Conga 1		Hi Conga 1		Hi Conga 1	
	64	Lw Conga 2		Lw Conga 2		Lw Conga 2		Lw Conga 2	
	65	Hi Timbale 1		Hi Timbale 1		Hi Timbale 1		Hi Timbale 1	
	66	Lw Timbale 1		Lw Timbale 1		Lw Timbale 1		Lw Timbale 1	
	67	Hi Agogo		Hi Agogo		Hi Agogo		Hi Agogo	
	68	Lw Agogo		Lw Agogo		Lw Agogo		Lw Agogo	
	69	Cabasa		Cabasa		Cabasa		Cabasa	
	70	Maracas		Maracas		Maracas		Maracas	
	71	ShortWhistle	[EXC2]	ShortWhistle	[EXC2]	ShortWhistle	[EXC2]	ShortWhistle	[EXC2]
C5	72	Long Whistle	[EXC2]	Long Whistle	[EXC2]	Long Whistle	[EXC2]	Long Whistle	[EXC2]
	73	Short Guiro	[EXC3]	Short Guiro	[EXC3]	Short Guiro	[EXC3]	Short Guiro	[EXC3]
	74	Long Guiro	[EXC3]	Long Guiro	[EXC3]	Long Guiro	[EXC3]	Long Guiro	[EXC3]
	75	Claves		Claves		Claves		Claves	
	76	Hi WoodBlock		Hi WoodBlock		Hi WoodBlock		Hi WoodBlock	
	77	Lw WoodBlock		Lw WoodBlock		Lw WoodBlock		Lw WoodBlock	
	78	Mute Cuica	[EXC4]	Mute Cuica	[EXC4]	Mute Cuica	[EXC4]	Mute Cuica	[EXC4]
	79	Open Cuica	[EXC4]	Open Cuica	[EXC4]	Open Cuica	[EXC4]	Open Cuica	[EXC4]
	80	MuteTriangle	[EXC5]	MuteTriangle	[EXC5]	MuteTriangle	[EXC5]	MuteTriangle	[EXC5]
	81	OpenTriangle	[EXC5]	OpenTriangle	[EXC5]	OpenTriangle	[EXC5]	OpenTriangle	[EXC5]
	82	Shaker 1		Shaker 1		Shaker 1		Shaker 1	
	83	Jingle Bell		Jingle Bell		Jingle Bell		Jingle Bell	
C6	84	Bell Tree		Bell Tree		Bell Tree		Bell Tree	
	85	Castanets A		Castanets A		Castanets A		Castanets A	
	86	Mute Surdo	[EXC6]	Mute Surdo	[EXC6]	Mute Surdo	[EXC6]	Mute Surdo	[EXC6]
	87	Open Surdo	[EXC6]	Open Surdo	[EXC6]	Open Surdo	[EXC6]	Open Surdo	[EXC6]
	88	-----		-----		-----		-----	
	89	-----		-----		-----		-----	
	90	-----		-----		-----		-----	
	91	-----		-----		-----		-----	
	92	-----		-----		-----		-----	
	93	-----		-----		-----		-----	
	94	-----		-----		-----		-----	
	95	-----		-----		-----		-----	
C7	96	-----		-----		-----		-----	

--- : no sound

[EXC] : will not sound simultaneously with other percussion instruments of the same number

		POWER		ELECTRONIC		TR-808		DANCE	
	33	Metro.Click1		Metro.Click1		Metro.Click1		Metro.Click1	
	34	Metro.Bell 1		Metro.Bell 1		Metro.Bell 1		Metro.Bell 1	
	35	Std BD 2		Std BD 2		Std BD 2		Std2 BD 1	
C2	36	Pwr BD		Elec BD		808 BD 1		808 BD 2A	
	37	Rim Shot		Rim Shot		808 Rim Shot		808 Rim Shot	
	38	Gated SD		Elec SD		808 SD		909 SD	
	39	Hand Clap 1		Hand Clap 1		Hand Clap 1		Hand Clap 1	
	40	Std SD 2		Gated SD		Std SD 2		Dnc SD 2B	
	41	Rm Lw Tom 2		Elec LwTom 2		808 LwTom 2		808 LwTom 2	
	42	Std Close HH	[EXC1]	Std Close HH	[EXC1]	808CloseHH A	[EXC1]	808CloseHH A	[EXC1]
	43	Rm Lw Tom 1		Elec LwTom 1		808 LwTom 1		808 LwTom 1	
	44	Std Pedal HH	[EXC1]	Std Pedal HH	[EXC1]	808CloseHH B	[EXC1]	808CloseHH B	[EXC1]
	45	Rm Md Tom 2		Elec MdTom 2		808 MdTom 2		808 MdTom 2	
	46	Std Open HH	[EXC1]	Std Open HH	[EXC1]	808 Open HH	[EXC1]	808 Open HH	[EXC1]
	47	Rm Md Tom 1		Elec MdTom 1		808 MdTom 1		808 MdTom 1	
C3	48	Rm Hi Tom 2		Elec HiTom 2		808 Hi Tom 2		808 Hi Tom 2	
	49	Crash Cym 1		Crash Cym 1		808 Cym		808 Cym	
	50	Rm Hi Tom 1		Elec HiTom 1		808 Hi Tom 1		808 Hi Tom 1	
	51	Ride Cym 1		Ride Cym 1		Ride Cym 1		Ride Cym 1	
	52	China Cym		Reverse Cym		China Cym		China Cym	
	53	Ride Bell		Ride Bell		Ride Bell		Ride Bell	
	54	Tambourine 1		Tambourine 1		Tambourine 1		Tambourine 1	
	55	Splash Cym		Splash Cym		Splash Cym		Splash Cym	
	56	Cowbell		Cowbell		808 Cowbell		808 Cowbell	
	57	Crash Cym 2		Crash Cym 2		Crash Cym 2		Crash Cym 2	
	58	Vibra-Slap 1		Vibra-Slap 1		Vibra-Slap 1		Vibra-Slap 1	
	59	Ride Cym 2		Ride Cym 2		Ride Cym 2		Ride Cym 2	
C4	60	Hi Bongo 1		Hi Bongo 1		Hi Bongo 1		Hi Bongo 1	
	61	Lw Bongo 1		Lw Bongo 1		Lw Bongo 1		Lw Bongo 1	
	62	Hi CongaMute		Hi CongaMute		808 Hi Conga		808 Hi Conga	
	63	Hi Conga 1		Hi Conga 1		808 MdConga		808 MdConga	
	64	Lw Conga 2		Lw Conga 2		808 LwConga		808 LwConga	
	65	Hi Timbale 1		Hi Timbale 1		Hi Timbale 1		Hi Timbale 1	
	66	Lw Timbale 1		Lw Timbale 1		Lw Timbale 1		Lw Timbale 1	
	67	Hi Agogo		Hi Agogo		Hi Agogo		Hi Agogo	
	68	Lw Agogo		Lw Agogo		Lw Agogo		Lw Agogo	
	69	Cabasa		Cabasa		Cabasa		Cabasa	
	70	Maracas		Maracas		808 Maracas		808 Maracas	
	71	ShortWhistle	[EXC2]	ShortWhistle	[EXC2]	ShortWhistle	[EXC2]	ShortWhistle	[EXC2]
C5	72	Long Whistle	[EXC2]	Long Whistle	[EXC2]	Long Whistle	[EXC2]	Long Whistle	[EXC2]
	73	Short Guiro	[EXC3]	Short Guiro	[EXC3]	Short Guiro	[EXC3]	Short Guiro	[EXC3]
	74	Long Guiro	[EXC3]	Long Guiro	[EXC3]	Long Guiro	[EXC3]	Long Guiro	[EXC3]
	75	Claves		Claves		808 Claves		808 Claves	
	76	Hi WoodBlock		Hi WoodBlock		Hi WoodBlock		Hi WoodBlock	
	77	Lw WoodBlock		Lw WoodBlock		Lw WoodBlock		Lw WoodBlock	
	78	Mute Cuica	[EXC4]	Mute Cuica	[EXC4]	Mute Cuica	[EXC4]	Mute Cuica	[EXC4]
	79	Open Cuica	[EXC4]	Open Cuica	[EXC4]	Open Cuica	[EXC4]	Open Cuica	[EXC4]
	80	MuteTriangle	[EXC5]	MuteTriangle	[EXC5]	MuteTriangle	[EXC5]	MuteTriangle	[EXC5]
	81	OpenTriangle	[EXC5]	OpenTriangle	[EXC5]	OpenTriangle	[EXC5]	OpenTriangle	[EXC5]
	82	Shaker 1		Shaker 1		Shaker 1		Shaker 1	
	83	Jingle Bell		Jingle Bell		Jingle Bell		Jingle Bell	
C6	84	Bell Tree		Bell Tree		Bell Tree		Bell Tree	
	85	Castanets A		Castanets A		Castanets A		Castanets A	
	86	Mute Surdo	[EXC6]	Mute Surdo	[EXC6]	Mute Surdo	[EXC6]	Mute Surdo	[EXC6]
	87	Open Surdo	[EXC6]	Open Surdo	[EXC6]	Open Surdo	[EXC6]	Open Surdo	[EXC6]
	88	-----		-----		-----		-----	
	89	-----		-----		-----		-----	
	90	-----		-----		-----		-----	
	91	-----		-----		-----		-----	
	92	-----		-----		-----		-----	
	93	-----		-----		-----		-----	
	94	-----		-----		-----		-----	
	95	-----		-----		-----		-----	
C7	96	-----		-----		-----		-----	

--- : no sound

[EXC] : will not sound simultaneously with other percussion instruments of the same number

		BRUSH		BRUSH 2		ORCHESTRA		SOUND EFFECT	
	33	Metro.Click1		Metro.Click1		Metro.Click1		-----	
	34	Metro.Bell 1		Metro.Bell 1		Metro.Bell 1		-----	
	35	Bsh BD 2		Bsh BD 2		Concert BD 2		-----	
C2	36	Bsh BD 1		Std2 BD 1		Concert BD 1		-----	
	37	Rim Shot		Rim Shot		Rim Shot		-----	
	38	Bsh Tap		Bsh Tap		Concert SD A		-----	
	39	Bsh Slap		Bsh Slap		Castanets		High Q	
	40	Bsh Sweep		Bsh Sweep		Concert SD B		Slap	
	41	Lw Tom 2		Bsh Lw Tom 2		Timpani F		Scratch Push	[EXC7]
	42	Std Close HH	[EXC1]	Std Close HH	[EXC1]	Timpani F#		Scratch Pull	[EXC7]
	43	Lw Tom 1		Bsh Lw Tom 1		Timpani G		Sticks	
	44	Std Pedal HH	[EXC1]	Std Pedal HH	[EXC1]	Timpani G#		Square Click	
	45	Md Tom 2		Bsh Md Tom 2		Timpani A		Metronome Click	
	46	Std Open HH	[EXC1]	Std Open HH	[EXC1]	Timpani A#		Metronome Bell	
	47	Md Tom 1		Bsh Md Tom 1		Timpani B		Guitar sliding Finger	
C3	48	Hi Tom 2		Bsh Hi Tom 2		Timpani c		Guitar cutting noise (down)	
	49	Crash Cym 1		Crash Cym 1		Timpani c#		Guitar cutting noise (up)	
	50	Hi Tom 1		Bsh Hi Tom 1		Timpani d		String slap of double bass	
	51	Ride Cym 1		Ride Cym 1		Timpani d#		Fl.Key Click	
	52	China Cym		China Cym		Timpani e		Laughing	
	53	Ride Bell		Ride Bell		Timpani f		Screaming	
	54	Tambourine 1		Tambourine 1		Tambourine 1		Punch	
	55	Splash Cym		Splash Cym		Splash Cym		Heart Beat	
	56	Cowbell		Cowbell		Cowbell		Footsteps1	
	57	Crash Cym 2		Crash Cym 2		ConcertCym 2		Footsteps2	
	58	Vibra-Slap 1		Vibra-Slap 1		Vibra-Slap 1		Applause	
	59	Ride Cym 2		Ride Cym 2		ConcertCym 1		Door Creaking	
C4	60	Hi Bongo 1		Hi Bongo 1		Hi Bongo 1		Door	
	61	Lw Bongo 1		Lw Bongo 1		Lw Bongo 1		Scratch	
	62	Hi CongaMute		Hi CongaMute		Hi CongaMute		Wind Chimes	
	63	Hi Conga 1		Hi Conga 1		Hi Conga 1		Car-Engine	
	64	Lw Conga 2		Lw Conga 2		Lw Conga 2		Car-Stop	
	65	Hi Timbale 1		Hi Timbale 1		Hi Timbale 1		Car-Pass	
	66	Lw Timbale 1		Lw Timbale 1		Lw Timbale 1		Car-Crash	
	67	Hi Agogo		Hi Agogo		Hi Agogo		Siren	
	68	Lw Agogo		Lw Agogo		Lw Agogo		Train	
	69	Cabasa		Cabasa		Cabasa		Jetplane	
	70	Maracas		Maracas		Maracas		Helicopter	
	71	ShortWhistle	[EXC2]	ShortWhistle	[EXC2]	ShortWhistle	[EXC2]	Starship	
C5	72	Long Whistle	[EXC2]	Long Whistle	[EXC2]	Long Whistle	[EXC2]	Gun Shot	
	73	Short Guiro	[EXC3]	Short Guiro	[EXC3]	Short Guiro	[EXC3]	Machine Gun	
	74	Long Guiro	[EXC3]	Long Guiro	[EXC3]	Long Guiro	[EXC3]	Lasergun	
	75	Claves		Claves		Claves		Explosion	
	76	Hi WoodBlock		Hi WoodBlock		Hi WoodBlock		Dog	
	77	Lw WoodBlock		Lw WoodBlock		Lw WoodBlock		Horse-Gallop	
	78	Mute Cuica	[EXC4]	Mute Cuica	[EXC4]	Mute Cuica	[EXC4]	Birds	
	79	Open Cuica	[EXC4]	Open Cuica	[EXC4]	Open Cuica	[EXC4]	Rain	
	80	MuteTriangle	[EXC5]	MuteTriangle	[EXC5]	MuteTriangle	[EXC5]	Thunder	
	81	OpenTriangle	[EXC5]	OpenTriangle	[EXC5]	OpenTriangle	[EXC5]	Wind	
	82	Shaker 1		Shaker 1		Shaker 1		Seashore	
	83	Jingle Bell		Jingle Bell		Jingle Bell		Stream	
C6	84	Bell Tree		Bell Tree		Bell Tree		Bubble	
	85	Castanets A		Castanets A		Castanets A		Cat	
	86	Mute Surdo	[EXC6]	Mute Surdo	[EXC6]	Mute Surdo	[EXC6]	-----	
	87	Open Surdo	[EXC6]	Open Surdo	[EXC6]	Open Surdo	[EXC6]	-----	
	88	-----		-----		Applause		-----	
	89	-----		-----		-----		-----	
	90	-----		-----		-----		-----	
	91	-----		-----		-----		-----	
	92	-----		-----		-----		-----	
	93	-----		-----		-----		-----	
	94	-----		-----		-----		-----	
	95	-----		-----		-----		-----	
C7	96	-----		-----		-----		-----	

--- : no sound

[EXC] : will not sound simultaneously with other percussion instruments of the same number

Instruments List (Rhythm Customize Function)

● POP

PopCrashCym1
PopCrashCym2
Splash Cym
Pop ChinaCym
PopRideCym1A
Pop RideCym2
Pop RideBell
Cymbal Roll
Pop CloseHH1
Pop CloseHH2
Pop Pedal HH
Pop Open HH
Pop SD 1
Pop SD 2
Pop SD Flm B
Pop SD 3C
Pop SD 3D
Pop SD Flm A
R&B SD B
Rk SD 2A
Rk SD 2B
Jz SD C
Jz SD D
Rm SD 1
Rm SD 2
8850 SD 1
8850 SD 2
SD Roll
Pop Rim Shot
Rk Rim ShotB
Pop Hi Tom
Pop HiTomFlm
Pop Md Tom
Pop MdTomFlm
Pop Lw Tom
Pop LwTomFlm
Pop BD A
Pop BD B
Pop BD C
Rk BD 2
Jz BD 1
Hip BD 1
Std2 BD 2A
Std2 BD 2B
8850 BD 1
8850 BD 2
909 BD 1A
909 BD 1B
909 BD 2
Jungle BD A
Jungle BD B
Tambourine 2
BongoCowbelA
BongoCowbelB
ChaChaCowbel
Vibra-Slap 2
707 Claps
Hand Clap 1A
Hand Clap 1B
Hand Clap 2
Gospel Clap
FlamencClapL
FlamencClapR
Finger Snap
Hi Bongo 2
Hi BongoMute
Lw Bongo 2
Lw BongoMute
Hi CongaSlap
Hi Conga 2
Lw Conga 2
Hi Timbale 2
HiTimbaleFlm
Lw Timbale 2
LoTimbaleFlm
HiTimbalePhr
Hi Agogo
Lw Agogo
Shaker 1
Shaker 2
Shaker 3
ShortWhistle
Long Whistle
Short Guiro
Long Guiro
Claves
Hi WoodBlock
Lw WoodBlock
Mute Cuica
Open Cuica
MuteTriangle
OpenTriangle
Jingle Bell
Bell Tree
Castanets A
Mute Surdo
Open Surdo
Cana
Shekere 1
Shekere 2
Vox Afahhh B
Vox That B
Vox Aahhh B

● R&B

PopCrashCym1
PopCrashCym2
Splash Cym
Pop ChinaCym
PopRideCym1A
PopRideCym1B
Pop RideBell
Cymbal Roll
Pop CloseHH1
Pop CloseHH2
Pop Pedal HH
Pop Open HH
R&B SD A
R&B SD B
Pop SD 3C
Pop SD 3D
Pop SD 3E
Pop SD Flm A
Pop SD Flm B
Rk SD 2A
Rk SD 2B
Jz SD C
Jz SD D
Rm SD 1
Rm SD 2
8850 SD 1
8850 SD 2
SD Roll
Pop Rim Shot
Rk Rim ShotB
Pop Hi Tom
Pop HiTomFlm
Pop Md Tom
Pop MdTomFlm
Pop Lw Tom
Pop LwTomFlm
Pop BD A
Pop BD B
Pop BD C
Rk BD 2
Jz BD 1
Hip BD 1
Std2 BD 2A
Std2 BD 2B
8850 BD 1
8850 BD 2
909 BD 1A
909 BD 1B
909 BD 2
Jungle BD A
Jungle BD B
Tambourine 2
BongoCowbelA
BongoCowbelB
ChaChaCowbel
Vibra-Slap 2
707 Claps
Hand Clap 1A
Hand Clap 1B
Hand Clap 2
Gospel Clap
FlamencClapL
FlamencClapR
Finger Snap
Hi Bongo 2
Hi BongoMute
Lw Bongo 2
Lw BongoMute
Hi CongaSlap
Hi Conga 2
Lw Conga 2
Hi Timbale 2
HiTimbaleFlm
Lw Timbale 2
LoTimbaleFlm
HiTimbalePhr
Hi Agogo
Lw Agogo
Shaker 1
Shaker 2
Shaker 3
ShortWhistle
Long Whistle
Short Guiro
Long Guiro
Claves
Hi WoodBlock
Lw WoodBlock
Mute Cuica
Open Cuica
MuteTriangle
OpenTriangle
Jingle Bell
Bell Tree
Castanets A
Mute Surdo
Open Surdo
Cana
Shekere 1
Shekere 2
Vox Afahhh B
Vox That B
Vox Aahhh B

● ROCK

PopCrashCym1
Splash Cym
Pop ChinaCym
China Cym
Rk Ride Cym
PopRideCym1B
Pop RideBell
Cymbal Roll
Rk CloseHH 1
Rk CloseHH 2
Rk Pedal HH
Rk Open HH
Rk SD 1A
Rk SD 1B
Rk SD Flm
Pop SD 3A
Pop SD 3B
Pop SD 3C
Pop SD 3D
Pop SD Flm A
R&B SD B
Jz SD C
Jz SD D
Rm SD 1
Rm SD 2
8850 SD 1
8850 SD 2
SD Roll
Rk Rim ShotA
Rk Rim ShotB
Rk Hi Tom
Rk HiTom Flm
Rk Md Tom
Rk MdTom Flm
Rk Lw Tom
Rk LwTom Flm
Rk BD 1A
Rk BD 1B
Rk BD 2
Pop BD C
Jz BD 1
Hip BD 1
Std2 BD 2A
Std2 BD 2B
8850 BD 1
8850 BD 2
909 BD 1A
909 BD 1B
909 BD 2
Jungle BD A
Jungle BD B
Tambourine 2
BongoCowbelA
BongoCowbelB
ChaChaCowbel
Vibra-Slap 2
707 Claps
Hand Clap 1A
Hand Clap 1B
Hand Clap 2
Gospel Clap
FlamencClapL
FlamencClapR
Finger Snap
Hi Bongo 2
Hi BongoMute
Lw Bongo 2
Lw BongoMute
Hi CongaSlap
Hi Conga 2
Lw Conga 2
Hi Timbale 2
HiTimbaleFlm
Lw Timbale 2
LoTimbaleFlm
HiTimbalePhr
Hi Agogo
Lw Agogo
Shaker 1
Shaker 2
Shaker 3
ShortWhistle
Long Whistle
Short Guiro
Long Guiro
Claves
Hi WoodBlock
Lw WoodBlock
Mute Cuica
Open Cuica
MuteTriangle
OpenTriangle
Jingle Bell
Bell Tree
Castanets A
Mute Surdo
Open Surdo
Cana
Shekere 1
Shekere 2
Vox Afahhh B
Vox That B
Vox Aahhh B

● JAZZ BRUSH

Jz CrashCym1
Jz CrashCym2
Splash Cym
Jz China Cym
Jz RideCym 1
Jz RideCym 2
Pop RideCym2
Cymbal Roll
Pop CloseHH1
Pop CloseHH2
Pop Pedal HH
Pop Open HH
Jz SD A
Jz SD B
Jz SD C
Jz SD D
Jz SD Sweep1
Jz SD Sweep2
Pop SD 3A
Pop SD 3B
Pop SD 3C
Pop SD 3D
Pop SD Flm A
R&B SD B
Rm SD 1
Rm SD 2
8850 SD 1
8850 SD 2
SD Roll
Rk Rim ShotB
Jz Hi Tom
Jz HiTom Flm
Jz Md Tom
Jz MdTom Flm
Jz Lw Tom
Jz LwTom Flm
Pop BD A
Pop BD B
Pop BD C
Rk BD 2
Jz BD 1
Hip BD 1
Std2 BD 2A
Std2 BD 2B
8850 BD 1
8850 BD 2
909 BD 1A
909 BD 1B
909 BD 2
Jungle BD A
Jungle BD B
Tambourine 2
BongoCowbelA
BongoCowbelB
ChaChaCowbel
Vibra-Slap 2
707 Claps
Hand Clap 1A
Hand Clap 1B
Hand Clap 2
Gospel Clap
FlamencClapL
FlamencClapR
Finger Snap
Hi Bongo 2
Hi BongoMute
Lw Bongo 2
Lw BongoMute
Hi CongaSlap
Hi Conga 2
Lw Conga 2
Hi Timbale 2
HiTimbaleFlm
Lw Timbale 2
LoTimbaleFlm
HiTimbalePhr
Hi Agogo
Lw Agogo
Shaker 1
Shaker 2
Shaker 3
ShortWhistle
Long Whistle
Short Guiro
Long Guiro
Claves
Hi WoodBlock
Lw WoodBlock
Mute Cuica
Open Cuica
MuteTriangle
OpenTriangle
Jingle Bell
Bell Tree
Castanets A
Mute Surdo
Open Surdo
Cana
Shekere 1
Shekere 2
Vox Afahhh B
Vox That B
Vox Aahhh B

● HIP HOP

Crash Cym 1
Crash Cym 2
Splash Cym
Reverse Cym
Ride Cym 1
Ride Cym 2
Ride Bell
808CloseHH A
808CloseHH B
808 Open HH
Dnc SD 2A
Dnc SD 2B
Dnc SD 2C
Dnc SD 2D
Dnc SD 2E
Dnc SD 2F
Dnc SD 2G
Dnc SD 2H
Dnc SD 1A
Dnc SD 1B
Dnc SD 1C
Dnc SD 1D
Std SD 1A
Std SD 1B
Std SD 1C
Std SD 1D
Std SD 2A
Std SD 2B
Std2 SD 1
Rm SD 1A
Rm SD 1B
Rm SD 1C
Elec SD
808 SD A
808 SD B
808 SD C
909 SD A
909 SD B
909 SD C
909 SD D
909 SD E
909 SD F
Concert SD
SD Roll
808 Rim Shot
Sticks
Lw Tom 1
Lw Tom 2
Md Tom 1
Md Tom 2
Hi Tom 1
Hi Tom 2
808 BD 2A
808 BD 2B
808 BD 2C
808 BD 2D
808 BD 2E
808 BD 2F
808 BD 2G
808 BD 2H
808 BD 2I
808 BD 2J
808 BD 2K
808 BD 2L
808 BD 2M
808 BD 2N
808 BD 1
Hip BD2
Std BD 1
Std2 BD 1
Rm BD
Elec BD
TambourinShk
808 Cowbell
Vibra-Slap 1
Hand Clap 1
Finger SnapA
Hi Bongo 1
Lw Bongo 1
Hi CongaMute
Hi Conga 1
Lw Conga 2
Hi Timbale 1
Lw Timbale 1
Hi Agogo
Lw Agogo
Shaker 1
Cabasa
Maracas
ShortWhistle
Long Whistle
Short Guiro
Long Guiro
808 Claves
Hi WoodBlock
Lw WoodBlock
Mute Cuica
Open Cuica
MuteTriangle
OpenTriangle
Jingle Bell
Bell Tree
Castanets A
Mute Surdo
Open Surdo
Applause
High-Q
Slap
Scratch Push
Scratch Pull
Square Click
Metro.Click1
Metro.Click2
Metro.Bell 1
Metro.Bell 2
Voice One
Voice Two
Voice Three

● VOX DRUM

Vox Dut
Vox Dom
Vox Trush
Vox Hehho
Vox Doyear
Vox Thu
Vox That A
Vox That B
Vox Aahhh A
Vox Aahhh B
Vox Tu
Vox Dooh
Vox Ptu
Vox Down
Vox Pa
Vox Bom
Vox Toear
Vox Aahhu
Vox Toya
Vox Thuh
Vox Cheey
Vox Cymm
Vox Tub
Vox Pruru
Vox Tut
Vox Tyun
Vox Tdum
Vox Afahhh A
Vox Afahhh B
Cymbal Roll
Pop Pedal HH
Pop SD 3C
Pop SD 3D
Pop SD Flm A
R&B SD B
Rk SD 2A
Rk SD 2B
Jz SD C
Jz SD D
Rm SD 1
Rm SD 2
8850 SD 1
8850 SD 2
Rk Rim ShotB
Pop BD C
Rk BD 2
Jz BD 1
Hip BD 1
Vox Bum
Std2 BD 2
8850 BD 1
8850 BD 2
909 BD 1A
909 BD 1B
909 BD 2
Jungle BD A
Jungle BD B
BongoCowbelA
BongoCowbelB
707 Claps
Hand Clap 1A
Hand Clap 1B
Hand Clap 2
Gospel Clap
FlamencClapL
FlamencClapR
Finger Snap
Hi Bongo 2
Hi BongoMute
Lw Bongo 2
Lw BongoMute
Hi CongaSlap
Hi Conga 2
Lw Conga 2
Hi Timbale 2
HiTimbaleFlm
Lw Timbale 2
LoTimbaleFlm
HiTimbalePhr
Hi Agogo
Lw Agogo
Shaker 1
Shaker 2
Shaker 3
ShortWhistle
Long Whistle
Short Guiro
Long Guiro
Claves
Hi WoodBlock

Lw WoodBlock
Mute Cuica
Open Cuica
MuteTriangle
OpenTriangle
Jingle Bell
Bell Tree
Castanets A
Mute Surdo
Open Surdo
Cana
Shekere 1
Shekere 2

● STANDARD

Crash Cym 1
Crash Cym 2
Splash Cym
China Cym
Ride Cym 1
Ride Cym 2
Ride Bell
Std Close HH
Std Pedal HH
Std Open HH
Std SD 1
Std SD 2
SD Roll
Rim Shot
Sticks
Hi Tom 1
Hi Tom 2
Md Tom 1
Md Tom 2
Lw Tom 1
Lw Tom 2
Std BD 1
Std BD 2
Tambourine 1
Cowbell
Vibra-Slap 1
Hand Clap 1
Finger SnapA
Hi Bongo 1
Lw Bongo 1
Hi CongaMute
Hi Conga 1
Lw Conga 2
Hi Timbale 1
Lw Timbale 1
Hi Agogo
Lw Agogo
Shaker 1
Cabasa
Maracas
ShortWhistle
Long Whistle
Short Guiro
Long Guiro
Claves
Hi WoodBlock
Lw WoodBlock
Mute Cuica
Open Cuica
MuteTriangle
OpenTriangle
Jingle Bell
Bell Tree
Bar Chimes A
Castanets A
Mute Surdo
Open Surdo
High-Q
Slap
Scratch Push
Scratch Pull
Square Click
Metro.Click1
Metro.Bell 1

● STANDARD 2

Crash Cym 1
Crash Cym 2
Splash Cym
China Cym
Ride Cym 1
Ride Cym 2
Ride Bell
Std2 CloseHH
Std2 PedalHH
Std2 Open HH
Std2 SD 1
Std2 SD 2
SD Roll
Rim Shot
Sticks
Hi Tom 1
Hi Tom 2
Md Tom 1
Md Tom 2
Lw Tom 1
Lw Tom 2
Std2 BD 1
Std2 BD 2
Tambourine 1
Cowbell
Vibra-Slap 1
Hand Clap 1
Finger SnapA
Finger SnapB
Hi Bongo 1
Lw Bongo 1
Hi CongaMute
Hi Conga 1
Lw Conga 2
Hi Timbale 1
Lw Timbale 1
Hi Agogo
Lw Agogo
Shaker 1
Cabasa
Maracas
ShortWhistle
Long Whistle
Short Guiro
Long Guiro
Claves
Hi WoodBlock
Lw WoodBlock
Mute Cuica
Open Cuica
MuteTriangle
OpenTriangle
Jingle Bell
Bell Tree
Bar Chimes A
Bar Chimes B
Castanets A
Mute Surdo
Open Surdo
High-Q
Slap
Scratch Push
Scratch Pull
Square Click
Metro.Click1
Metro.Bell 1

● ROOM

Crash Cym 1
Crash Cym 2
Splash Cym
China Cym
Ride Cym 1
Ride Cym 2
Ride Bell
Std Close HH
Std Pedal HH
Std Open HH
Std SD 1
Std SD 2
SD Roll
Rim Shot
Sticks
Rm Hi Tom 1
Rm Hi Tom 2
Rm Md Tom 1
Rm Md Tom 2
Rm Lw Tom 1
Rm Lw Tom 2
Std BD 1
Std BD 2
Tambourine 1
Cowbell
Vibra-Slap 1
Hand Clap 1
Finger SnapA
Hi Bongo 1
Lw Bongo 1
Hi CongaMute
Hi Conga 1
Lw Conga 2
Hi Timbale 1
Lw Timbale 1
Hi Agogo
Lw Agogo
Shaker 1
Cabasa
Maracas
ShortWhistle
Long Whistle
Short Guiro
Long Guiro
Claves
Hi WoodBlock
Lw WoodBlock
Mute Cuica
Open Cuica
MuteTriangle
OpenTriangle
Jingle Bell
Bell Tree
Bar Chimes A
Castanets A
Mute Surdo
Open Surdo
High-Q
Slap
Scratch Push
Scratch Pull
Square Click
Metro.Click1
Metro.Bell 1

● ROOM 2

Crash Cym 1
Crash Cym 2
Splash Cym
China Cym
Ride Cym 1
Ride Cym 2
Ride Bell
Std2 CloseHH
Std2 PedalHH
Std2 Open HH
Rm SD 1
Std2 SD 1
SD Roll
Rim Shot
Sticks
Rm2 Hi Tom 1
Rm2 Hi Tom 2
Rm2 Md Tom 1
Rm2 Md Tom 2
Rm2 Lw Tom 1
Rm2 Lw Tom 2
Rm BD
Std2 BD 1
Tambourine 1
Cowbell
Vibra-Slap 1
Hand Clap 1
Finger SnapA
Hi Bongo 1
Lw Bongo 1
Hi CongaMute
Hi Conga 1
Lw Conga 2
Hi Timbale 1
Lw Timbale 1
Hi Agogo
Lw Agogo
Shaker 1
Cabasa
Maracas
ShortWhistle
Long Whistle
Short Guiro
Long Guiro
Claves
Hi WoodBlock
Lw WoodBlock
Mute Cuica
Open Cuica
MuteTriangle
OpenTriangle
Jingle Bell
Bell Tree
Bar Chimes A
Castanets A
Mute Surdo
Open Surdo
High-Q
Slap
Scratch Push
Scratch Pull
Square Click
Metro.Click1
Metro.Bell 1

● POWER

Crash Cym 1
Crash Cym 2
Splash Cym
China Cym
Ride Cym 1
Ride Cym 2
Ride Bell
Std Close HH
Std Pedal HH
Std Open HH
Gated SD
Std SD 2
SD Roll
Rim Shot
Sticks
Rm Hi Tom 1
Rm Hi Tom 2
Rm Md Tom 1
Rm Md Tom 2
Rm Lw Tom 1
Rm Lw Tom 2
Pwr BD
Std BD 2
Tambourine 1
Cowbell
Vibra-Slap 1
Hand Clap 1
Finger SnapA
Hi Bongo 1
Lw Bongo 1
Hi CongaMute
Hi Conga 1
Lw Conga 2
Hi Timbale 1
Lw Timbale 1
Hi Agogo
Lw Agogo
Shaker 1
Cabasa
Maracas
ShortWhistle
Long Whistle
Short Guiro
Long Guiro
Claves
Hi WoodBlock
Lw WoodBlock
Mute Cuica
Open Cuica
MuteTriangle
OpenTriangle
Jingle Bell
Bell Tree
Bar Chimes A
Castanets A
Mute Surdo
Open Surdo
High-Q
Slap
Scratch Push
Scratch Pull
Square Click
Metro.Click1
Metro.Bell 1

● ELECTRONIC

Crash Cym 1
Crash Cym 2
Splash Cym
Reverse Cym
Ride Cym 1
Ride Cym 2
Ride Bell
Std Close HH
Std Pedal HH
Std Open HH
Elec SD
Gated SD
SD Roll
Rim Shot
Sticks
Elec HiTom 1
Elec HiTom 2
Elec MdTom 1
Elec MdTom 2
Elec LwTom 1
Elec LwTom 2
Elec BD
Std BD 2
Tambourine 1
Cowbell
Vibra-Slap 1
Hand Clap 1
Finger SnapA
Hi Bongo 1
Lw Bongo 1
Hi CongaMute
Hi Conga 1
Lw Conga 2
Hi Timbale 1
Lw Timbale 1
Hi Agogo
Lw Agogo
Shaker 1
Cabasa
Maracas
ShortWhistle
Long Whistle
Short Guiro
Long Guiro
Claves
Hi WoodBlock
Lw WoodBlock
Mute Cuica
Open Cuica
MuteTriangle
OpenTriangle
Jingle Bell
Bell Tree
Bar Chimes A
Castanets A
Mute Surdo
Open Surdo
High-Q
Slap
Scratch Push
Scratch Pull
Square Click
Metro.Click1
Metro.Bell 1

● TR-808

808 Cym
Crash Cym 2
Splash Cym
China Cym
Ride Cym 1
Ride Cym 2
Ride Bell
808CloseHH A
808CloseHH B
808 Open HH
808 SD
Std SD 2

SD Roll
808 Rim Shot
Sticks
808 Hi Tom 1
808 Hi Tom 2
808 Md Tom 1
808 Md Tom 2
808 Lw Tom 1
808 Lw Tom 2
808 BD 1
Std BD 2
Tambourine 1
808 Cowbell
Vibra-Slap 1
Hand Clap 1
Finger SnapA
Hi Bongo 1
Lw Bongo 1
808 Hi Conga
808 Md Conga
808 Lw Conga
Hi Timbale 1
Lw Timbale 1
Hi Agogo
Lw Agogo
Shaker 1
Cabasa
808 Maracas
ShortWhistle
Long Whistle
Short Guiro
Long Guiro
808 Claves
Hi WoodBlock
Lw WoodBlock
Mute Cuica
Open Cuica
MuteTriangle
OpenTriangle
Jingle Bell
Bell Tree
Bar Chimes A
Castanets A
Mute Surdo
Open Surdo
High-Q
Slap
Scratch Push
Scratch Pull
Square Click
Metro.Click1
Metro.Bell 1

● DANCE

808 Cym
Crash Cym 2
Splash Cym
China Cym
Ride Cym 1
Ride Cym 2
Ride Bell
808CloseHH A
808CloseHH B
808 Open HH
909 SD
Dnc SD 2B
SD Roll
808 Rim Shot
Dnc SD 1
808 Hi Tom 1
808 Hi Tom 2
808 Md Tom 1
808 Md Tom 2
808 Lw Tom 1
808 Lw Tom 2
808 BD 2A
Std2 BD 1
Tambourine 1
808 Cowbell
Vibra-Slap 1
Hand Clap 1
Finger SnapA
Hi Bongo 1
Lw Bongo 1
808 Hi Conga
808 Md Conga
808 Lw Conga
Hi Timbale 1
Lw Timbale 1
Hi Agogo
Lw Agogo
Shaker 1
Cabasa
808 Maracas
ShortWhistle
Long Whistle
Short Guiro
Long Guiro
808 Claves
Hi WoodBlock
Lw WoodBlock
Mute Cuica
Open Cuica
MuteTriangle
OpenTriangle
Jingle Bell
Bell Tree
Bar Chimes A
Castanets A
Mute Surdo
Open Surdo
High-Q
Slap
Scratch Push
Scratch Pull
Square Click
Metro.Click1
Metro.Bell 1

● JAZZ

Crash Cym 1
Crash Cym 2
Splash Cym
China Cym
Ride Cym 1
Ride Cym 2
Ride Bell
Std Close HH
Std Pedal HH
Std Open HH
Std SD 1
Std SD 2
SD Roll
Rim Shot
Sticks
Hi Tom 1
Hi Tom 2
Md Tom 1
Md Tom 2
Lw Tom 1
Lw Tom 2
Bsh BD 1
Bsh BD 2
Tambourine 1
Cowbell
Vibra-Slap 1
Hand Clap 1
Finger SnapA
Hi Bongo 1
Lw Bongo 1
Hi CongaMute
Hi Conga 1
Lw Conga 2
Hi Timbale 1
Lw Timbale 1
Hi Agogo
Lw Agogo
Shaker 1
Cabasa
Maracas
ShortWhistle
Long Whistle
Short Guiro
Long Guiro
Claves
Hi WoodBlock
Lw WoodBlock
Mute Cuica
Open Cuica
MuteTriangle
OpenTriangle
Jingle Bell
Bell Tree
Bar Chimes A
Castanets A
Mute Surdo
Open Surdo
High-Q
Slap
Scratch Push
Scratch Pull
Square Click
Metro.Click1
Metro.Bell 1

● BRUSH

Crash Cym 1
Crash Cym 2
Splash Cym
China Cym
Ride Cym 1
Ride Cym 2
Ride Bell
Std Close HH
Std Pedal HH
Std Open HH
Bsh Tap
Bsh Slap
Bsh Sweep
SD Roll
Rim Shot
Sticks
Hi Tom 1
Hi Tom 2
Md Tom 1
Md Tom 2
Lw Tom 1
Lw Tom 2
Bsh BD 1
Bsh BD 2
Tambourine 1

Cowbell
Vibra-Slap 1
Finger SnapA
Hi Bongo 1
Lw Bongo 1
Hi CongaMute
Hi Conga 1
Lw Conga 2
Hi Timbale 1
Lw Timbale 1
Hi Agogo
Lw Agogo
Shaker 1
Cabasa
Maracas
ShortWhistle
Long Whistle
Short Guiro
Long Guiro
Claves
Hi WoodBlock
Lw WoodBlock
Mute Cuica
Open Cuica
MuteTriangle
OpenTriangle
Jingle Bell
Bell Tree
Bar Chimes A
Castanets A
Mute Surdo
Open Surdo
High-Q
Slap
Scratch Push
Scratch Pull
Square Click
Metro.Click1
Metro.Bell 1

● BRUSH 2

Crash Cym 1
Crash Cym 2
Splash Cym
China Cym
Ride Cym 1
Ride Cym 2
Ride Bell
Std Close HH
Std Pedal HH
Std Open HH
Bsh Tap
Bsh Slap
Bsh Sweep
SD Roll
Rim Shot
Sticks
Bsh Hi Tom 1
Bsh Hi Tom 2
Bsh Md Tom 1
Bsh Md Tom 2
Bsh Lw Tom 1
Bsh Lw Tom 2
Std2 BD 1
Bsh BD 2
Tambourine 1
Cowbell
Vibra-Slap 1
Finger SnapA
Hi Bongo 1
Lw Bongo 1
Hi CongaMute
Hi Conga 1
Lw Conga 2
Hi Timbale 1
Lw Timbale 1
Hi Agogo
Lw Agogo
Shaker 1
Cabasa
Maracas
ShortWhistle
Long Whistle
Short Guiro
Long Guiro
Claves
Hi WoodBlock
Lw WoodBlock
Mute Cuica
Open Cuica
MuteTriangle
OpenTriangle
Jingle Bell
Bell Tree
Bar Chimes A
Castanets A
Mute Surdo
Open Surdo
High-Q
Slap
Scratch Push
Scratch Pull
Square Click
Metro.Click1
Metro.Bell 1

● ORCHESTRA

ConcertCym 1
ConcertCym 2
Splash Cym
Ride Cym 1
Std Close HH
Std Pedal HH
Std Open HH
Concert SD A
Concert SD B
SD Roll
Rim Shot
Sticks
Timpani f
Timpani e
Timpani d#
Timpani d
Timpani c#
Timpani c
Timpani B
Timpani A#
Timpani A
Timpani G#
Timpani G
Timpani F#
Timpani F
Concert BD 1
Concert BD 2
Tambourine 1
Cowbell
Vibra-Slap 1
Finger SnapA
Hi Bongo 1
Lw Bongo 1
Hi CongaMute
Hi Conga 1
Lw Conga 2
Hi Timbale 1
Lw Timbale 1
Hi Agogo
Lw Agogo
Shaker 1
Cabasa
Maracas
ShortWhistle
Long Whistle
Short Guiro
Long Guiro
Claves
Hi WoodBlock
Lw WoodBlock
Mute Cuica
Open Cuica
MuteTriangle
OpenTriangle
Jingle Bell
Bell Tree
Bar Chimes A
Castanets A
Castanets B
Mute Surdo
Open Surdo
Applause
Square Click
Metro.Click1
Metro.Bell 1

Key to Abbreviations

Rk → Rock
Jz → JazzBrush
Hip → HipHop
Std → Standard
Rm → Room
Std2 → Standard2
Rm2 → Room2
Pwr → Power
Elec → Electric
Bsh → Brush
Hi → High
Md → Mid
Lw → Low
Cym → Cymbal
HH → HighHat
SD → SnareDrum
BD → BassDrum
Flm → Flam
Phr → Phrase
Metro. → Metronome

Rhythm List

■ Big Band/Swing

New Big Band
Fast BigBand
Big Serenade
LooseBigBand
Swing
Organ Swing
Slow Swing
Scat Swing
Jazz Band
BigBandSwing
Big Band
Blues
Combo
Club Swing
Vocal Swing

■ Country/Gospel

D Country 2
Cntry Dreams
OldtimeCntry
CountryWaltz
Gospel Pop
Soft Gospel
GospelBallad
Gospel 2
Cajun
Twostep
Anthem
Revival
R&B

■ Oldies/Contempo

Dreamin'
'50s Pop 1
Let's Twist
Swing Pop
Groovin'
Michael'sPop
'70s 1
Let's Dance
Mersey Beat
Surf'fun
Pop'n'Roll
Acoustic Pop
Easy Listen2
Hip Hop
House Pop
Euro Dance
Beach Sound

■ Ballad

8BeatBallad2
Love Romance
Soft Ballad
Love Songs
6/8 Ballad
MediumBallad
Scat Ballad
Crystal
SunnyFeelin'
Pop Ballad
Torch Song

■ World

Paris
French Waltz
Irish
Hawaiian
Hula

■ Latin

Bossa Nova 1
Samba Rio
Salsa
Mambo 3
Slow Rhumba
Beguine
Trad Tango
ChaCha 2
Bossa Nova 2
Slow Bossa
Samba
Slow Beguine
Plena
Latin
Latin Fusion

■ Waltz/March

StringsWaltz
Waltz
Quiet Waltz
Slow Waltz
March
MarchingBand
March 4/4
March 2/4
Summer Days
Simple March

■ Trad/Showtime

Foxtrot 2
Quick Step
Dixieland
Lager Polka
Broadway
Raindrops
Festival
Screen 2

■ Acoustic

Guitar Trio
Fireside
G.Slow
P.Pop
P.Slow
P.Swing
R.8-Beat 1
R.8-Beat 2
R.16-Beat 1
R.16-Beat 2
R.16-Beat 3
R.Swing 1
R.Shuffle 1
R.Waltz 1
R.March 1
R.5-Beat

■ Disk/User

6/8 Ballad
Trad Tango
MarchingBand
Guitar Trio

Music Style Disk List

Disk 1

01 BigBndBalld2
02 Boogie
03 Jazz Band
04 Blues 2
05 Blues 3
06 Big Band 4
07 Swing
08 MidiumSwing2
09 Slow Swing 2
10 Bluegrass 1
11 Bluegrass 2
12 Cajun
13 Slow Country
14 ContryBallad
15 CountrySwing
16 Two Step 2
17 Train Beat
18 Twist 2
19 Slow Rock 2
20 Baroque
21 Classic
22 Charleston
23 Dixieland 2
24 Foxtrot
25 Macarena
26 Miami
27 Merenge
28 Reggae
29 Tequila
30 Hawaiian 2
31 Bossa Nova 2
32 FastBosaNova
33 Bossa Nova 5
34 Chacha 3
35 Salsa 2
36 Mambo 2
37 Samba 2
38 Tango 4
39 Beguine 2
40 Easy Listen3
41 Easy Listen4
42 Easy Listen5
43 Easy Listen6
44 Easy Listen7
45 Pop Piano
46 ShufflePop 1
47 Gospel 2
48 GospelBallad
49 French Waltz
50 Vienna Waltz
51 Folk Waltz
52 Slow Waltz 2
53 Swing Waltz
54 March 2/4
55 D Marsch 6/8
56 R&B 2
57 Rock'n'Roll2
58 Rock'n'Roll3
59 Contemp 1
60 Contemp 2
61 Funk 1
62 Dance Pop 2

Disk 2

01 Standard
02 Five
03 Afro & Swing
04 Country Rock
05 ContryWaltz2
06 Western
07 Western 2
08 Ragtime 2
09 PianoBoogie2
10 Reggae 2
11 Volk Musik
12 Bossa Nova 6
13 Rhumba 3
14 Dance Rhumba
15 Dance Mambo
16 Tango 3
17 Tango 5
18 Tango 6
19 Sevilla
20 Pop 1
21 Pop 2
22 Pop 3
23 Ballad 2
24 Ballad 3
25 Simple 8Beat
26 Gt.Arpeggio1
27 Gt.Arpeggio2
28 ThreeFinger1
29 ThreeFinger2
30 Gt.Stroke
31 Gt.Shuffle
32 16BeatShffl2
33 DeutchWalzer
34 Jazz Waltz 2
35 Swing Waltz2
36 SimpleMarch2
37 Folk Dance
38 8Beat Enka
39 16Beat Enka
40 Ondo
41 Schlager 1
42 Schlager 2
43 Schlager 3
44 Contemp 3
45 Rock 1
46 Rock 2
47 Rock 3
48 Funk 2
49 70's Disco 2
50 Dance Pop 1
51 Dance Pop 3
52 Dance Pop 4
53 Dance Pop 5

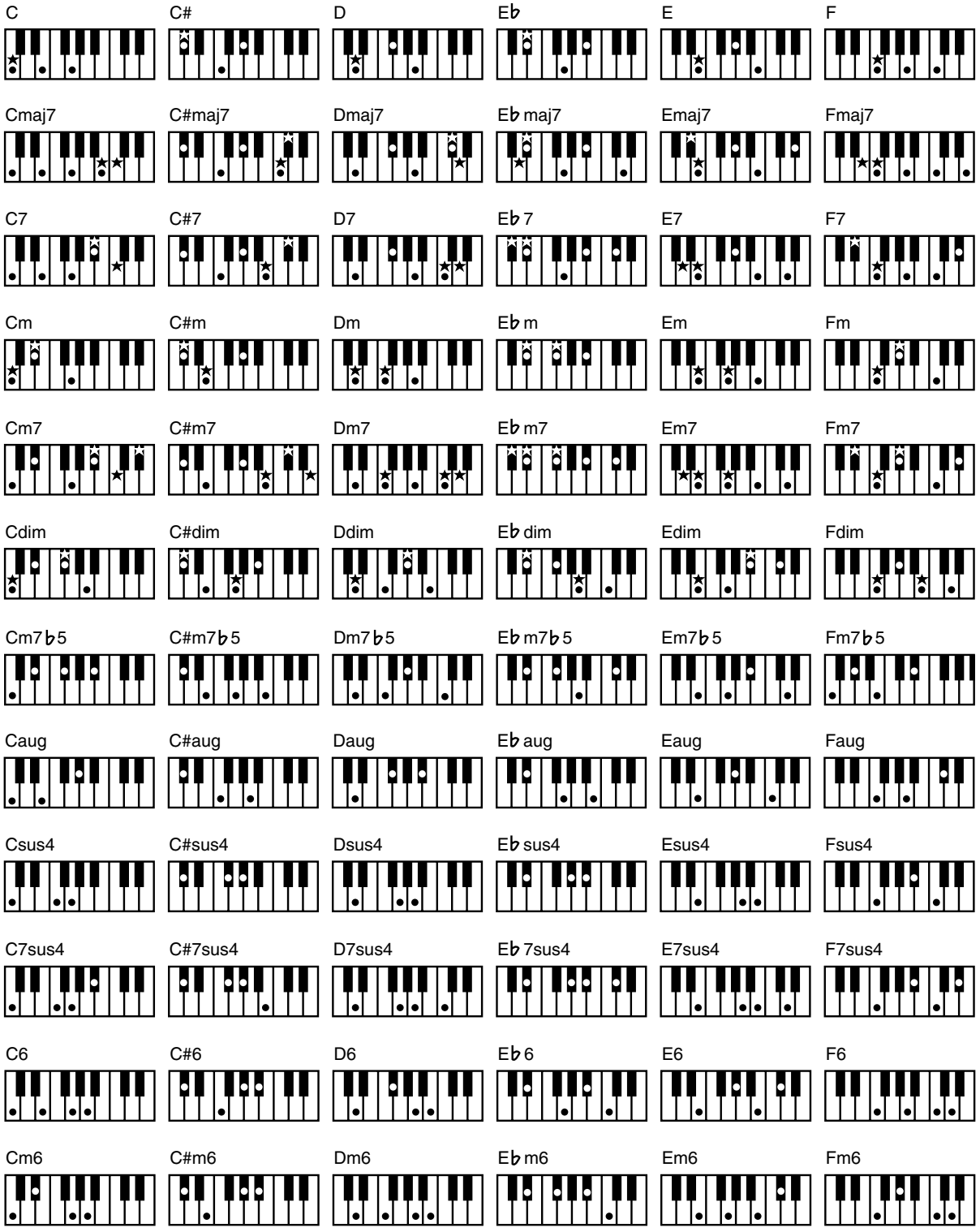
World

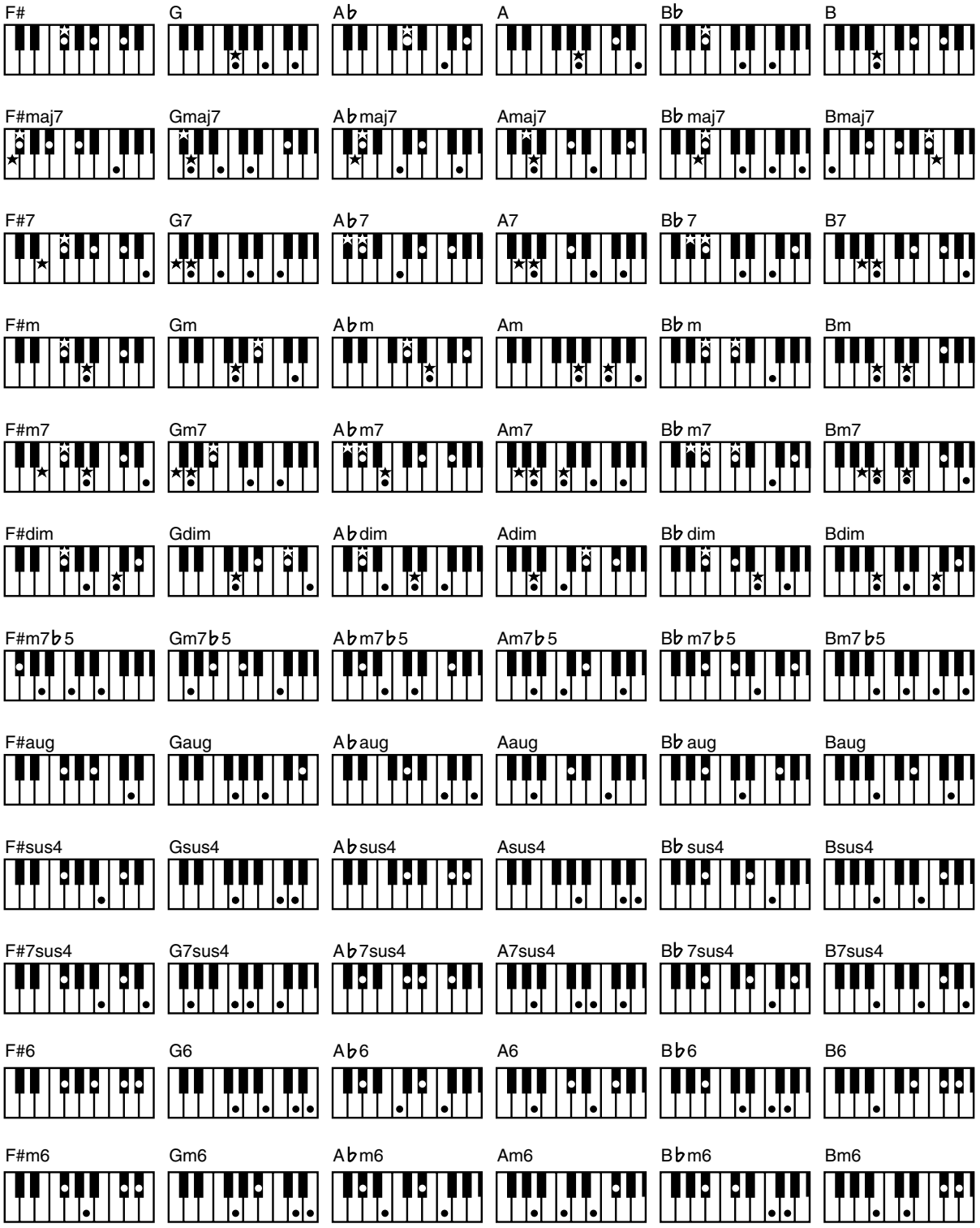
01 Tejano
02 Country Folk
03 Country Rock
04 CountryBlues
05 Rock'n'Night
06 StridePiano
07 Piano Ballad
08 SFX Movie
09 Scotland 6/8
10 British Pop
11 Disco People
12 70's 8beat
13 On The Town
14 Fast Waltz
15 12/8 Ballad
16 Easy Swing
17 German Waltz
18 Deutsch-Pop
19 Polonaise
20 Ballade 6/8
21 Disco-Beat
22 Party-Beat
23 Dt'Halfbeat
24 Evergreen
25 Paris Waltz
26 Paris March
27 ChansonTango
28 Java
29 French Pop 1
30 French Pop 2
31 French Pop 3
32 Paso Doble
33 Mood Kayou
34 TasogareTown
35 Enka 1
36 Enka 2
37 16Beat Pop
38 Power 8Beat
39 AshitaNoHero
40 Groupe Sounds
41 House Pop

Chord List

● symbol: Indicates the constituent not of chord.

★ symbol: Chord shown with an "★"can be played by pressing just the key marked with the "★."




F#
G
A♭
A
B♭
B
F#maj7
Gmaj7
A♭maj7
Amaj7
B♭maj7
Bmaj7
F#7
G7
A♭7
A7
B♭7
B7
F#m
Gm
A♭m
Am
B♭m
Bm
F#m7
Gm7
A♭m7
Am7
B♭m7
Bm7
F#dim
Gdim
A♭dim
Adim
B♭dim
Bdim
F#m7♭5
Gm7♭5
A♭m7♭5
Am7♭5
B♭m7♭5
Bm7♭5
F#aug
Gaug
A♭aug
Aaug
B♭aug
Baug
F#sus4
Gsus4
A♭sus4
Asus4
B♭sus4
Bsus4
F#7sus4
G7sus4
A♭7sus4
A7sus4
B♭7sus4
B7sus4
F#6
G6
A♭6
A6
B♭6
B6
F#m6
Gm6
A♭m6
Am6
B♭m6
Bm6

Glossary

Arrangement

This refers to changes that have been made in an original tune, by adding a new accompaniment or by changing the instruments used.

Automatic Accompaniment

Automatic Accompaniment is automatic accompaniment when just a few keys in the lower section of the keyboard are pressed to specify the chord.

Basic Chord

This refers to the most commonly used types of chord, which are generally the following six types: major chords, minor chords, minor seventh chords, minor seventh (5) chords, dominant seventh chords, and diminished seventh chords.

Chord

Notes of two or more pitches sounded simultaneously. Chords consisting of three notes are called "triads," and are the most basic type of chord.

Chorus

An effect that adds spaciousness and richness to the sound.

Ending

This is the last part of the accompaniment. When you stop playing the Automatic Accompaniment, the AT-45 plays an Ending appropriate for the Rhythm.

Glide

An effect that temporarily lowers the pitch and then gradually returns it to normal.

Intro

This is the introductory portion of an Automatic Accompaniment performance. The AT-45 plays an intro ideally suited to each Rhythm when it starts playing the Automatic Accompaniment.

Inversion

When the lowest note of a chord is the root, the chord is said to be in "root position." In contrast, forms of a chord in which other notes are the lowest pitch are called "inversions."

Mute

To silence a sound. The AT-45 provides a Track Mute function that allows you to turn off the track button indicator of a track on which music data has been recorded, so that the corresponding track will temporarily be silenced.

Panel Settings

Settings such as sound selections, tempo, Rotary fast/slow.

Pitch Bend

An effect that smoothly raises or lowers the pitch.

Registration

A unit of data that contains the performance state of the instrument, such as sound selections and panel settings.

Reverb

An effect that simulates the reverberation of a room or concert hall.

Root Note

The root note is the basis of a chord. All chords are built on a root note, which is the part of the chord name given in uppercase letters.

Rotary

An effect which simulates the modulation given to the sound when a rotating speaker is used. The Rotary effect produces two types of modulation: fast or slow.

Split

A function which allows the keyboard to be divided into two or more areas, and a different sound assigned to each area. The point at which the keyboard is divided is called the "Split Point."

Sustain

An effect that adds a decay to each note. The AT-45 allows sustain to be applied to the voices of the upper part, lower part, and pedal part.

Vibrato

An effect that cyclically modulates the pitch.

Voice

The AT-45 is able to produce the sounds of various instruments. These sounds are called "Voices."

■ About ATELIER Series Sound Generator

The ATELIER series come equipped with GM2/GS sound generators.

General MIDI

General MIDI is a set of recommendations which seeks to provide a way to go beyond the limitations of proprietary designs, and standardize the MIDI capabilities of sound generating devices. Sound generating devices and music files that meet the General MIDI standard bear the General MIDI logo ( ).
Music files bearing the General MIDI logo can be played back using any General MIDI sound generating unit to produce essentially the same musical performance.

General MIDI 2

The upwardly compatible General MIDI 2 ( ) recommendations pick up where the original General MIDI left off, offering enhanced expressive capabilities, and even greater compatibility. Issues that were not covered by the original General MIDI recommendations, such as how sounds are to be edited, and how effects should be handled, have now been precisely defined. Moreover, the available sounds have been expanded. General MIDI 2 compliant sound generators are capable of reliably playing back music files that carry either the General MIDI or General MIDI 2 logo. In some cases, the conventional form of General MIDI, which does not include the new enhancements, is referred to as "General MIDI 1" as a way of distinguishing it from General MIDI 2.

GS format

The GS Format ( ) is Roland's set of specifications for standardizing the performance of sound generating devices. In addition to including support for everything defined by the General MIDI, the highly compatible GS Format additionally offers an expanded number of sounds, provides for the editing of sounds, and spells out many details for a wide range of extra features, including effects such as reverb and chorus.
Designed with the future in mind, the GS Format can readily include new sounds and support new hardware features when they arrive.

SMF with Lyrics

"SMF with Lyrics" refers to SMF (Standard MIDI File) that contains the lyrics. When music files carrying the "SMF with Lyrics" logo are played back on a compatible device (one bearing the same logo), the lyrics appears in its display.

XGlite

XG is a tone generator format of YAMAHA Corporation, that defines the ways in which voices are expanded or edited and the structure and type of effects, in addition to the General MIDI 1 specification.
XGlite is a simplified version of XG tone generation format. You can play back any XG music files using an XGlite tone generator. However, keep in mind that some music files may play back differently compared to the original files, due to the reduced set of control parameters and effects.

Settings That Are Stored After the Power Is Turned Off

■ Settings That Are Stored After the Power Is Turned Off

Arranger Update
Trans. Update (Transpose Update)
Master Tune
Rotary Speed
Rotary Color
Regist Shift (Registration Shift)
Exp. Curve (Expression Curve)
Send PC Switch
MIDI IN Mode
Lyric On/Off
Metronome Sound
Registration Name
Main Bouncing Ball
Main Background
Auto Std Tempo (Auto Standard Tempo)

■ Settings That Are Stored In the Registration Buttons

Registration Name
Regist Shift (Registration Shift)
Arranger Update
Trans. Update (Transpose Update)
Exp. Curve (Expression Curve)

■ Settings That Are Stored In the Individual Registration Buttons

Reverb Type
Reverb Depth
Solo [To Lower] button (ON/OFF)
Pedal [To Lower] button (ON/OFF)
Transpose [-] [+] button (Key Transpose)
L Foot Switch (Left Foot Switch Assignment)
R Foot Switch (Right Foot Switch Assignment)
Damper Pedal (Damper Pedal Assignment)
[Harmony Intelligence] button (ON/OFF)
Harmony Intelligence Type
Rotary [Fast/Slow] button (ON/OFF)
Rotary [ON/OFF] button (ON/OFF)
Bender/Vibrato Assignment
Pitch Bend Range
Pedal Bass Mode
Solo Mode
Solo To Lower Mode
Solo Split Point
Sustain (ON/OFF)
Sustain Length
Tx MIDI Channel
Initial Touch setting
PC Number (Program Change Number)
Bank LSB (Bank Select LSB)
Bank MSB (Bank Select MSB)
Wall Type
The Voices assigned for each part
Level [▲][▼] (Part Balance Volume)
The Reverb depth for each part
The Chorus settings (ON/OFF) of the voice
The Octave settings for each part
The voices assigned to the [Others] buttons for each part
[Drums/SFX] button (ON/OFF)
Drum/SFX Set
Selected Rhythm
[Intro/Ending] button (ON/OFF)
[Sync Start] button (ON/OFF)
Style Orchestrator
Variation/Original
Chord Intelligence ON/OFF
Chord Hold ON/OFF
Leading Bass ON/OFF
Arranger [ON/OFF] button (ON/OFF)
Lower Voice [Hold] button (ON/OFF)
Tempo setting
Volume of the rhythm Accompaniment part
Reverb depth of the rhythm Accompaniment part
Volume of the rhythm drum part
Reverb depth of the rhythm drum part
Volume of the rhythm bass part
Reverb depth of the rhythm bass part

Roland Organ

Model AT-45

MIDI Implementation Chart

Date : Mar 1, 2004

Version : 1.00

Function...		Transmitted	Recognized	Remarks
Basic Channel	Default	1 (Solo) 2 (Pedal) 3 (Lower) 4 (Upper) 11 (Drums/SFX) 16 (Expression, PC, V-LINK)	1 (Solo) *5 2 (Pedal) *5 3 (Lower) *5 4 (Upper) *5 11 (Drums/SFX) *5 16 (Expression) *5 1–16 (GM2/GS) *6	
	Changed	1–16	X	
Mode	Default	x	Mode 3	
	Messages	x	Mode 3, 4(M=1)	* 10
	Altered	**********		
Note Number :	True Voice	29–103 **********	0–127 0–127	
Velocity	Note ON	O *1	O	
	Note OFF	x 8n v=64	x	
After Touch	Key's	x	O *2, 8	
	Ch's	x	O *2, 7, 8, 9	
Pitch Bend		x	O *2, 7, 8, 9	
Control Change	0, 32	O *1	O *3, 7, 8	Bank select
	1	x	O *2, 7, 8, 9	Modulation
	5	x	O *2, 7, 8	Portamento time
	6, 38	x	O *2, 7, 8, 9	Data entry
	7	x	O *2, 7, 8, 9	Volume
	10	x	O *3, 7, 8, 9	Panpot
	11	O	O *3, 7, 8, 9	Expression
	16	x	O *4	General purpose controller (Glide)
	64	O	O *3, 7, 8, 9	Hold 1
	65	x	O *3, 7, 8	Portamento
	66	x	O *2, 7, 8	Sostenuto
	67	x	O *2, 7, 8	Soft
	71	x	O *7	Resonance
	72	x	O *7	Release Time
	73	x	O *7	Attack Time
	74	x	O *7	Cut off
	75	x	O *7	Decay Time
	76	x	O *7	Vibrato Time
	77	x	O *7	Vibrato Depth
	84	x	O *2, 8	Portamento control
	91	x	O *3, 7, 8	Effect1 depth
	93	x	O *3, 7, 8	Effect3 depth
	98, 99	x	O *3, 8	NRPN LSB, MSB
	100, 101	x	O *2, 7, 8, 9	RPN LSB, MSB
Prog Change	: True #	0–127 *1 **********	O *3, 7, 8, 9 0–127	Program number 1–128
System Exclusive		O *11	O	
System Common	: Song Pos	x	x	
	: Song Sel	x	x	
	: Tune	x	x	
System Real Time	: Clock	O	x	
	: Commands	O	x	
Aux Message	: All sound off	x	O (120, 126, 127) *7, 8	
	: Reset all controllers	x	O *7, 8	
	: Local Control	x	x	
	: All Notes OFF	x	O (123–125) *7, 8, 9	
	: Active Sense	O	O	
	: Reset	x	x	

Notes

* 1 O x is selectable.
* 2 O x is selectable by SysEx. (GS Part)
* 3 Not received in the keyboard part
* 4 Can be received in the keyboard part
* 5 With MIDI IN Mode 2
* 6 With MIDI IN Mode 1
* 7 Received in GM2 mode
* 8 Received in GS mode
* 9 Received in General MIDI mode
* 10 Recognaize as M=1 even if M≠1.
* 11 V-LINK

Mode 1 : OMNI ON, POLY
Mode 2 : OMNI ON, MONO
Mode 3 : OMNI OFF, POLY
Mode 4 : OMNI OFF, MONO

O : Yes
X : No

Demo Song List

Song Title	Composer	Player	Copyright
Pop Organ	Ralf Schink	Ralf Schink	© 2004 Roland Corporation
Jazz Combo	Ric Iannone	Ric Iannone	© 2003 Roland Corporation
Slow Waltz	Ric Iannone	Ric Iannone	© 2003 Roland Corporation
Hawaiian	Ric Iannone	Ric Iannone	© 2003 Roland Corporation
PianoStrings	Hector Olivera	Hector Olivera	© 2001 Roland Corporation
Dixieland	Ric Iannone	Ric Iannone	© 2003 Roland Corporation
Country	Ric Iannone	Ric Iannone	© 2003 Roland Corporation
FastBigBand	Rosemary Bailey	Rosemary Bailey	© 2001 Roland Corporation
Gregorian	Ric Iannone	Ric Iannone	© 1999 Roland Corporation
Organ Swing	Hal Vincent	Hal Vincent	© 2001 Roland Corporation
Soft Gospel	Ric Iannone	Ric Iannone	© 2001 Roland Corporation
Jazz Scat	Ric Iannone	Ric Iannone	© 1999 Roland Corporation
Acoustic	Ric Iannone	Ric Iannone	© 2001 Roland Corporation
TheaterOrgan	Jonas Nordwall	Jonas Nordwall	© 1995 Rodgers Instruments LLC
Big Band	Ric Iannone	Ric Iannone	© 1999 Roland Corporation

Profile

Hal Vincent

Hal consistently delights his audiences with his keyboard artistry. He is equally at home on either the organ, piano, or electronic keyboard. Around the world, his concerts generate the often heard comment "....we loved it because he plays our kind of music." This is another of Hal's special skills: a knack for knowing just what music to play on any occasion.

An extensive repertoire combined with more than 30 years of world touring have netted Hal rave reviews while affording him the opportunity to work with some of the top names in show business. Hal has recorded several albums and published books of organ arrangements while establishing himself as an excellent clinician and teacher.

Hector Olivera

Hector Olivera was born in Argentina. He received his education at the Conservatory and the University of Buenos Aires followed by a scholarship at the famous Juilliard School of Music in New York. Olivera has performed extensively throughout the world including concerts at prestigious places such as the Notre Dame Cathedral in Paris and Carnegie Hall in New York. Hector Olivera's expertise involves both the traditional pipe organ and the electronic organ. Presently Olivera tours internationally playing some of the world's most magnificent pipe organs as well as his preferred electronic organ, the Roland Atelier for which he continues to collaborate with its development.

Jonas Nordwall

A native of Portland, Mr. Nordwall received his Bachelor of Music Degree in 1970 from the University of Portland studying with Arthur Hitchcock. Additional study was done with Frederick Geoghegan, the noted English/Canadian organist. As a teenager, Jonas had the privilege to study with Richard Ellsasser, one of the greatest virtuoso organist of 20th century.

Besides serving as Director of Music for the First United Methodist Church in Portland, Oregon and as the Organist for the Oregon Symphony Orchestra.

He has been a featured recitalist for national conventions of the American Theatre Organ Society and was Organist of the year for 1987.

Ralf Schink

Ralf Schink was born in Germany and began playing the electronic organ at the age of 9. After completing his formal education Ralf went on to study at the renowned Swiss Jazz School in Bern, Switzerland as well as the Berklee College of Music in Boston. Since then, his energetic, contemporary style has won him many accolades throughout Europe and around the world. Ralf regularly performs at the Frankfurt Musik Messe, the largest musical fair in Europe. A tremendously versatile and gifted musician, Ralf is comfortable with all types of music. From pop to jazz, Ralf's repertoire appeals to all age groups. Since 1992 Ralf has been working and touring for Roland Europe as demonstrator and product consultant. He regularly tours Europe, Asia and Canada.

Ric Iannone

Ric Iannone began playing the piano and accordion at the age of two and a half. By the time he was seven, he was performing public and private engagements with his musician father. For more than 20 years Ric has performed and traveled extensively throughout the United States and Europe, delighting audiences with his unique playing style and music arrangements. He is equally comfortable playing the organ, piano or keyboard, as a concert artist and product demonstrator.

Rosemary Bailey

Rosemary Bailey began playing the piano at the age of five, performing strictly classical music. She soon diversified and incorporated jazz and traditional popular styles in her repertoire. By the time she was nine years old, Rosemary had begun touring throughout the United states.

Concurrently, she maintained a weekly radio show, The Rosemary Bailey Show, broadcast from Chicago.

Rosemary has performed with many name artists including Victor Borge and Peter Nero as well as the Duke Ellington Orchestra. She was also featured soloist with the Chicago Symphony under the direction of Dr. Leon Stein.

At home on electronic as well as pipe organs, her concert schedule has taken her to such countries as Japan, South Africa, Canada, Italy, Spain, England, Holland, Denmark, Portugal, Germany and Australia.

Rosemary's unique arrangements involve the marriage of her classical and popular music background. Perfect pitch enables her to effortlessly field requests from the audience and adds spontaneity to all her programs.

Rosemary has developed a following of musical devotees wherever she performs and her numerous recordings are sought after by young and old alike.

List of Shortcuts

Quick Guide Function

Short Cut		Screen/Setting
While the Quick Guide screen is displayed,	Expression Pedal	Controller screen/Exp. Curve (Expression Curve)
	[Bender/Vibrato] lever	Controller screen/Bender/Vibrato
	Upper Keyboard	Upper Keyboard screen/Solo Mode
	Lower Keyboard	Split Point screen
	Pedalboard	Pedalboard screen/Pedal Bass Mode
	Left Foot Switch Right Foot Switch	Controller screen/ L Foot Switch (Left Foot Switch) R Foot Switch (Right Foot Switch)
	Damper Pedal	Controller screen/Damper Pedal
	[Solo To Lower] button	Split Point screen
	Sustain [Pedal] button	Pedalboard screen/Sustain Length
	Rotary [On/Off] button	Effect screen/Rotary Color
	Rotary [Slow/Fast] button	Effect screen/Rotary Speed
	[Count Down] button	Rhythm Options screen/Count Down Sound
	Upper Voice select buttons Solo Voice select buttons [Alternate] button	Upper Keyboard screen
	Lower Voice select buttons [Alternate] button	Lower Keyboard screen
	Pedal Voice select buttons [Alternate] button	Pedalboard screen
	Registration [Write] button	Registration Options screen/Arranger Update screen
	[One Touch Program] button	Factory Reset screen
	[Harmony Intelligence] button	Panel Reset screen
	[Song] button	Song Clear screen (If the performance data has never been saved to a floppy disk, the Song Clear screen appears.)

Main Specifications

AT-45: Music ATELIER

Controller/Function	
Manual Keyboard	Upper keyboard 49 notes (C3 – C7), Lower keyboard 64 notes (A1 – C7)
Pedalboard	20 notes (C2 – G3)
Touch Response	Initial Touch with Sensitivity (10 levels for each Upper and Lower)
Sound Generator	Conforms to GS/GM2/XG Lite
Max. Polyphony	128 voices
Voices	185 voices
Upper Part	Upper Organ, Upper Orchestral
Lower Part	Lower Organ, Lower Orchestral
Solo Part	Solo
Pedal Part	Pedal
Rhythms	110 Rhythms
Disk Rhythm	4 Rhythms
	Music Style Disk (MSE, MSA series; sold separately) can provide additional Music Styles.
Number of Accompaniment/SMF play voices	226 voices
Arranger Function	Arranger On/Off, Start/Stop, Sync Start, Intro/Ending, Intro Count Down, Break, Fill In (To Variation, To Original), Style Orchestrator (Basic, Advanced 1, Advanced 2, Full), One Touch Program, Chord Intelligence, Chord Hold, Leading Bass, Auto Standard Tempo
Music Assistant	900 settings (4 variatoins for each 225 keywords)
One Touch Program	880 settings (8 settings for each rhythm)
Drum/SFX Sets	12 Drum Sets + 1 SFX Set
Master Tuning	415.3 Hz - 466.2 Hz (0.1 Hz Steps)
Key Transpose	-4 – +7 (in semitones)
Playback Transpose	-24 – +24 (in semitones)
Effects	Rotary Sound, Reverb, Sustain, Glide, Pitch Bend, Vibrato, Lower Voice Hold
Harmony Intelligence	8 Types
Registration Memories	8
Registration Functions	Load Next, Disk Edit
Composer	
Tracks	7 Tracks
Note Storage	Approx. 40,000 notes
Song Length	Max. 999 measures
Tempo	Quarter note = 20–500
Resolution	120 ticks per quarter note
Recording	Realtime (Replace, Punch In/Out, Loop)
Edit Function	Delete Measure, Delete Track, Erase, Copy, Quantize
Metronome	
Beat	2/2, 0/4, 2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 3/8, 6/8, 9/8, 12/8
Volume	10 levels
Sound	4 types

Main Specifications

Controller/Function	
Disk Storage: 3.5 inch micro floppy disk	
Disk Format	720 K bytes (2DD), 1.44 M bytes(2HD)
Songs	Max. 99
Rated Power Output	35 W+35 W
Speaker	
Full-range	25 cm x 2
Display	Graphic 320 x 240 dots backlit Color LCD with touch screen
Notation	Great Staff/G Clef Staff/F Clef Staff with note name, with Lyric (Built-in Display)
Lyric	Yes (Built-in Display)
Pedal	Expression Pedal (ready for the Active Expression feature), Damper Pedal
Connectors	Phones jack (Stereo), AC Inlet, MIDI connectors (In/Out), Audio output jacks (L (mono)/R), Audio input jacks (L (mono)/R), Mic jack
Power Supply	AC 117 V, AC 230 V, AC 240 V
Power Consumption	120 W (AC 117V) 120 W (AC 230V) 120 W (AC 240V)
Finish	Satin Mahogany
Dimensions	
Console	1242 (W) x 570 (D) x 480 (H) mm 48-15/16 (W) x 22-1/2 (D) x 18-15/16 (H) inches
Stand	1235 (W) x 515 (D) x 755 (H) mm 48-5/8 (W) x 20-5/16 (D) x 29-3/4 (H) inches
Total	1242 (W) x 570 (D) x 1225 (H) mm 48-15/16 (W) x 22-1/2 (D) x 48-1/4 (H) inches
Weight	
Console	44.0 kg 97 lbs 1 oz
Stand	40.0 kg 88 lbs 3 oz
Total	84.0 kg 185 lbs 3 oz
Accessories	Owner's manual, Power Cord, 3.5 inch micro floppy disk (2HD Blank Disk), Music Style Disk, World Style Disk, Music rest's attachment screws

* *In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.*

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As of January 15, 2005 (ROLAND)

For EU Countries

CE This product complies with the requirements of European Directives EMC 89/336/EEC and LVD 73/23/EEC.

For the USA

FEDERAL COMMUNICATIONS COMMISSION
RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

Unauthorized changes or modification to this system can void the users authority to operate this equipment.
This equipment requires shielded interface cables in order to meet FCC class B Limit.

For Canada

NOTICE

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

AVIS

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Roland Corporation

03568345 '05-2-3N